# The Resonator

Official Newsletter of The Fair Lawn (NJ) Amateur Radio Club

Volume 4, Number 12 www.FairLawnARC.org December 2019

## From The President:

To FLARC Members,

Thank you everyone for supporting FLARC in another amazing year. The club has grown to over 160 members, new antennas, and fully modernized operating stations and a lot of knowledge is transferring across generations. I appreciate all the member support across the past two years. We have transformed FLARC into a premier ham radio club and people are taking notice.

When the board asked me two years ago to run for President, I wasn't sure I could dedicate enough time to accomplish the goals I had in mind in one year, let alone the two past years. The good news is we got everything accomplished with time to spare due to the support from our dedicated membership.

The club continues to excel with its programs, events, and training. I hope the goal for next year will be to continue with those activities and continue to grow FLARC.

Brad – KM2C
FLARC President

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## Member Profile

NAME: **Carol Van Savage** CALL: **KD2NMV**

### What do you do/what did you do for a living?

I sell real estate and have since 1988 with a Century 21 office. I have also worked on Wall Street and in exporting truck parts.

### How did you first get interested in ham radio?

Van W2DLT invited me to a Field Day event and put me on the air and I made a couple of contacts. I was hooked.

### What parts of the hobby most interest you?

I guess really the contesting part of ham radio but I struggle with being fast enough to catch call signs and exchange information. But I do like it.

### What does belonging to FLARC mean to you? How do you/can you better contribute to the club?

I love being able to come to the club which is only a short distance from me and my home QTH.

I would love to learn Morse Code. My hearing is pretty good so I should be able to. Years ago I obtained a certification from the Library of Congress as a Braille transcriber.

### What should be the club's priorities in the next year?

In the next year I would like to see us reach out to the scouts, both boys and girls. They have parents that perhaps we can connect with.

There are so many possibilities even in surrounding towns. I am involved with a Veterans food pantry & maybe there is some outreach through this and other groups.

Continued on page 5.

## The Club

Fair Lawn ARC is the fastest growing ham club around, with five operating positions in a permanent clubhouse. Visitors and guests are always welcome. The club is open every Friday night from NLT 6:30 PM. Business meetings are the first Friday of the month at 7:30PM.

*2019 Officers, Committees and Assignments*

| | | |
|---|---|---|
| **President** | **Brad Kerber** | **KM2C** |
| **Vice President** | **Lowell Van't Slot** | **W2DLT** |
| **Treasurer** | **Al Rasmussen** | **WA2OWL** |
| **Secretary** | **Randy Smith** | **WU2S** |
| **Trustee** | **Skip Barker** | **KD2BRV** |
| **Trustee** | **Don Cassarini** | **N2PRT** |
| ***Field Day*** | **Steve Wraga** | **WA2BYX** |
| ***Member Services*** | **Judith Shaw** | **KC2LTM** |
| ***Publicity*** | **Ed Efchak** | **WX2R** |
| ***Publicity*** | **Gene Ottenheimer** | **WO2W** |
| ***Publicity*** | **Susan Frank** | **W6SKT** |
| ***Program*** | **Lowell Vant Slot** | **W2DLT** |
| ***Publicity*** | **Karl Frank** | **W2KBF** |
| ***Publicity*** | **Brad Kerber *(ex officio)*** | **KM2C** |
| ***Social Media*** | **Dave Marotti** | **NK2Q** |
| ***Video/YouTube*** | **Thom Guida** | **W2NZ** |
| ***VE Liaison*** | **Gene Ottenheimer** | **WO2W** |
| ***VE Liaison*** | **Pete Senesi** | **KD2BMX** |
| ***Education*** | **Gordon Beattie** | **W2TTT** |
| ***Education*** | **Randy Smith** | **WU2S** |
| ***Education*** | **John L. Howard** | **K2JLH** |
| ***Education*** | **Fred Wawra** | **W2ABE** |
| ***History*** | **Fred Belghaus** | **W2AAB** |
| ***Health and Welfare*** | **Judith Shaw** | **KC2LTM** |
| ***Photographer*** | **Don Cassarini** | **N2PRT** |
| ***W2NPT Trustee*** | **Paul Cornett** | **W2IP** |
| ***Technical*** | **Paul Cornett** | **W2IP** |
| ***Technical*** | **Randy Smith** | **WU2S** |
| ***Technical*** | **Fred Wawra** | **W2ABE** |
| **RACES Director** | **Dave Gotlib** | **KD2MOB** |
| **RACES Liaison** | **Steve Wraga** | **WA2BYX** |
| ***Newsletter Editor*** | **Ed Efchak** | **WX2R** |
| ***FL Town Liaison*** | **Gene Ottenheimer** | **WO2W** |
| ***Net Scheduler*** | **Brian Cirulnick** | **KD2KLN** |
| ***Quartermaster*** | **Brian Cirulnick** | **KD2KLN** |

## Fair Lawn RACES/ARES Corner

Before I begin this column in detail, I would like to wish everyone Happy Holidays. The FL-ARES members are preparing for emergency communications when necessary. Of course, this takes training and experience from our membership which currently numbers more than a dozen. We are fortunate to make Fair Lawn and the surrounding communities our home. With our leadership and support from the FLARC we can grow and be of assistance in many community events.

Our weekly KB2FLA nets have become more than just communication nets. One Wednesday per month (usually the 3rd Wednesday) Randy WU2S hosts a video net demonstration which covers various types of communication operations. Randy WU2S is an educator and has a wealth of knowledge we can all learn from.

FL-ARES is pleased to announce assistance to the FL-Community Emergency Response Team (CERT) for various events going forward. For the FL-ARES members who participate with FL-CERT, we will be operating on January 1, 2020 at the 5K Run at Memorial Middle School. More details will follow as we get closer to January 1st.

ARES through the ARRL is undergoing a 21st century makeover - the timing can't be any better. Please see the ARRL-ARES article linked below.

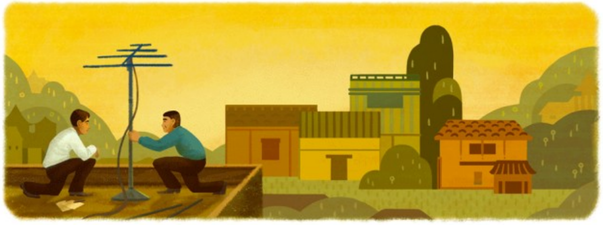
New ARES plan aligns ARES with the needs of Served Agencies:

http://www.arrl.org/news/new-plan-aligns-ares-with-the-needs-of-served-agencies

**Continued on page 31.**

## MASTER EVENT CALENDAR

| | |
|---|---|
| **December 6, 2019** | **FLARC Annual Meeting and Holiday Party - Fair Lawn Senior Center** |
| **December 7, 2019** | **Amateur Radio License Testing, 9 a.m. at Fair Lawn Community Center** |
| **December 13, 2019** | **Ria Jairam N2RJ "An Update On The ARRL Hudson Division"**** |
| **January 17, 2020** | **Florencia Pierri KD2PHZ "The First Mass Audience Radio Broadcast"** |
| **January 25-26, 2020** | **Winter Field Day – Memorial Park** |
| **February 21, 2020** | **Ed Efchak WX2R "The 2020 FLARC Member Survey Results" - at the club.** |
| **March 20, 2020** | **Howard Michel WB2ITX ARRL CEO "The ARRL Today" - Senior Center** |
| **April 17, 2020** | **Rich Moseson W2VU "75 Years of CQ Magazine" - Senior Center** |
| **May 15, 2020** | **Hal Kennedy N4GG "Spark At FLARC" Via Skype – Senior Center** |
| **June 27-28, 2020** | **ARRL FIELD DAY – Memorial Park** |
| **August 21, 2020** | **FLARC 3rd Annual Vintage Night --Senior Center** |
| **September 18, 2020** | **Lowell Van't Slot W2DLT "Working the CQWW SSB Contest At A Caribbean Superstation"— Senior Center** |
| **TBD** | **Return Visit To iHeartRadio/WSUS transmitter** |
| | **** 2nd Friday of month** |



Hidetsugu Yagi's 130th Birthday Google Doodle

## Follow FLARC ON THE WEB

| | |
|---|---|
| **Facebook:** | **http://facebook.FairLawnARC.org** |
| **Twitter:** | **@FairLawnARC** |
| **Blog:** | **http://blog.FairLawnARC.org** |
| **Youtube:** | **http://youtube.FairLawnARC.org** |
| **Website:** | **http://FairLawnARC.org** |

## FLARC VEC Ham License Exams

Our next test sessions are scheduled for **Saturday, December 7th** beginning at 09:00 at the Community Center. No advanced registration is required but always appreciated. The fee is $15.00 (cash or check).

Please bring positive identification (license, passport, etc.), your original license and a copy, original CSCE and a copy (if credit is needed).

The full exam schedule is on the club calendar at the FairLawnARC.org website. For further information contact VE-Liason@FairLawnARC.org.

Please refer also to the "License Exams" link on the main website--

**http://testing.FairLawnARC.org**

**We appreciate your support of the Fair Lawn Amateur Radio Club!**

**This is your Club! Be part of it!**

## Interested in Chasing DX?

A casual group of FLARCers including Van W2DLT, John KD2NRS, Brad KM2C, Karl W2KBF, Nomar NP4H, Steve WI2W, Jim W2JC, Larry WA2ALY and Fred W2AAB have formed an email group to keep each other in touch in (real) time of when the rare or interesting ones show up to chase.

Interested? See or contact Van W2DLT.

## Extra! Extra! Extra!

**Congratulations are in order to**
**Brian KD2KLN,**
**Don N2PRT and**
**Steve KA2YRA**
**who each received their Extra Class tickets at a Red Cross license class earlier this month.**

**Best Wishes To All!**

## FLARC Holiday Party Is Coming!

**-- Gene WO2W**

**We have recently gotten a lot of new members and many of them do not know the details of the auction and holiday party - so I thought I would fill everyone in.**

**Ever since I joined the club in 1962 we have had a Holiday party for members and family. Back then it was simply cold cut platters and some salads.**

**Around 1995 we had about 46 members and less than one thousand dollars in our treasury. Syd, N2ZSE and I said we need to raise some money to help pay for the holiday party and that is where the idea for the auction came from.**

**We are no longer in the same financial situation as back then, however traditions still carry on.**

**Our auction is the ONLY fund raiser we do all year, so besides dues this is the only money the club gets.**

## Please Note: Operating at W2NPT

**Starting in January 2019 club trustees have sign-in sheets for all operating positions. There is a clipboard at Operating Position #1, #2 (digital) and #4 with a form on which to sign up for half-hour time slots. No longer first come-first served, in fairness to all who want to use our club equipment and the new antennas. More details to follow.**

## Get Direct With FLARC!

Here is a direct link to specific club info: just a click away!

http://apparel.FairLawnARC.org
http://auction.FairLawnARC.org
http://blog.FairLawnARC.org
http://calendar.FairLawnARC.org
http://events.FairLawnARC.org
http://exams.FairLawnARC.org
http://facebook.FairLawnARC.org
http://testing.FairLawnARC.org
http://news.FairLawnARC.org
http://swap.FairLawnARC.org
http://tech.FairLawnARC.org
http://youtube.FairLawnARC.org

**NEW !**

**https://groups.io/g/FairLawnARC**

FAIR LAWN
N J
AMATEUR RADIO CLUB

## November 2019 Blog Traffic

Ups and downs month over month again for November. A mixed year as posts were up as well this month.

| | November 2019 | November 2018 | Change |
|---|---|---|---|
| **Views** | 971 | 937 | + 4% |
| **Visitors** | 493 | 525 | – 6% |
| **Posts** | 5 | 3 | + 67% |

There is new content nearly every day so it's really worth the look to both FairLawnARC.org and the blog.

http://blog.FairLawnARC.org

## Member Profile, Continued

**What other clubs or organizations do you belong?**

I have a General license and want to upgrade to the Advanced Extra.

I have joined ARRL and enjoy their magazine but I didn't do well in physics class!

I belong to an Elks lodge and to Rotary. I am trying to see how I can get some potential hams from these groups as well.

I do a lot of volunteer work and enjoy those activities. I am always trying to connect one to another.

## Opening Night For "Pop Up Tuesday"

A thanks to all who helped to make "PUT" a very enjoyable evening. A total of six were on hand for the opening ceremonies.

KC2K, W2NZ, W2KBF, W3EH, WX2R and KD2JGG (Gene) who we added as a new member! Good discussions and a new one (Senegal) in the W2NPT logbook.

Remember, by definition, PUT is not every Tuesday (at least not just yet). Your support via attendance will make opening Tuesdays more of a "regular" and less of a "pop-up" affair.

-- de Ed WX2R

## In Memoriam

**It is with great sadness that the Club announces the death of Frank Wachausen, K2HL (SK) on November 15, 2019.**

**He was a member of both FLARC and BARA and his death was a surprise to even his good friends.**

**The Club extends its sympathies to his family in its time of sorrow.**

## Club Apparel -- Get Them While They're RED!

Club apparel is always in vogue. Red is always "in" and your club friends all have them... you *want* a shirt or jacket for the next FLARC event!

Don't forget.... they're easy to order.
Go to www.hamthreads.com
or visit http://apparel.FairLawnARC.org

**Check out the item selection that is posted on the FLARC website (with pictures and prices)**. Order the shirts or other items you want with either the regular FLARC logo or the still-cool 60th anniversary logo. Note: **RED** is the primary and preferred club standard shirt color**.**

**S. Claus operating with FLARC winter gear and (unofficial) cap.**

### 2019 FLARC Speaker Series Locations:

***SPEAKERS WHO ARE FLARC MEMBERS:***
***FLARC CLUBHOUSE***

***SPEAKERS WHO ARE INVITED GUESTS:***
***FAIR LAWN SENIOR CENTER***

## Congratulations To Our New Officers!

**For the year 2020, we have --**

| | | |
|---|---|---|
| President | Nomar | NP4H |
| Vice President | John | W2JLH |
| Secretary | Randy | WU2S |
| Treasurer | AL | WA2OWL |
| Trustee (thru 2022) | Ed | WX2R |
| Trustee (thru 2021) | Don | N2PRT |
| Trustee (thru 2020) | Skip | KD2BRV |

Note: this info is available on our website during the year -- use link in left column.

**BEQUEATHS AND DONATIONS**

**Planned gifts usually imply the family donation of amateur equipment to the club when someone has become a Silent Key. But it can be more. Club members might consider making a gift through a will or trust; gifts that help provide lifetime income to the club. Consult with your lawyer, estate planner or tax advisor if you feel such as gift is worthy.**

## About The Club

*The Resonator* is published monthly and is the official (and only) newsletter of The Fair Lawn Amateur Radio Club. FLARC was established in 1956 and has met continuously since inception. **The club is sponsored by the Borough of Fair Lawn.** The club meets every Friday at 6PM at the club station in The Fair Lawn Community Center, 10-10 20th Street, Fair Lawn, NJ. Business meetings are the first Friday of the month at 7:30 PM.

**Visitors ARE ALWAYS welcome at our meetings.**

FLARC operates the W2NPT repeater (145.470- PL **167.9**) located high atop the Community Center. The analog repeater is open to all amateurs for use without restrictions.

The club has over one hundred paid members.
Dues are currently $25 per year/$20 for new members.

**For more information, please see our website, at**
http://membership.FairLawnARC.org

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## "POP-UP TUESDAYS" HAVE ARRIVED!

**The club will be open – *but not every Tuesday* – from 6:30 – 9:00. Check your email each week for the schedule.**

**FAIR LAWN'S COMMUNICATIONS CENTER!**

***With New Antennas On The Roof!***

## 2019 *Near and Far Net* Check-In's

Now in its third year, the FLARC *Near and Far* net is chugging along each week. Here is list of our check-ins beginning on New Year's Night in no particular order. Mondays at 8PM on the repeater.

| Name | Call |
|---|---|
| **Dave** | **N2AAM** |
| **Gene** | **WO2W** |
| **Van** | **W2DLT** |
| **Karl** | **W2KBF** |
| **Stan** | **KC2K** |
| **Ed** | **WX2R** |
| **Steve** | **WA2BYX** |
| **Brian** | **KD2KLN** |
| **Ken** | **W2KAC** |
| **John** | **K2BIX** |
| **Fred** | **W2AAB** |
| **Bob** | **KD2BKD** |
| **Randy** | **WU2S** |
| **Dave** | **KD2JIP** |
| **Larry** | **KD2QFI** |
| **Steve** | **WI2W** |
| **Brad** | **KM2C** |
| **Thom** | **WN2Z** |
| **Ron** | **KC2TBD** |
| **Dave** | **KD2MOB** |
| **Bob** | **KM4CPU** |
| **Bob** | **KE0OPX** |
| **Phil** | **KA2SEY** |
| **Dave** | **NK2Q** |
| **Noel** | **N2OEL** |
| **Ray** | **KD2RBW** |
| **Larry** | **KD2QFI** |
| **Matt** | **K2FTP** |
| **Paul** | **K2PJC** |
| **Tom** | **WB2KWD** |
| **Brian** | **KD2OAZ** |
| **Bob** | **N2HIP** |
| **Al** | **KC2SAV** |
| **Chris** | **W2TU** |
| **Anton** | **K2PLB** |
| **Ray** | **KD2RIK** |
| **Watson** | **K3WAT** |
| **Kevin** | **KD2RJM** |
| **Roger** | **K2RRB** |
| **Jonathan** | **KC2RRK** |
| **Glenn** | **KB2MDR** |

## 2019 Member Profiles

The year is now complete and here is a list of the 2019 monthly profiles. See past profiles elsewhere in *The Resonator* to check back in the archives to see each featured member's background.

| Month | Name | Call Sign |
|---|---|---|
| **January 2019** | **Dave** | **KD2JIP** |
| **February** | **Jim** | **K2ZO** |
| **March** | **Zach** | **KC2RSS** |
| **April** | **Bob** | **N2SU** |
| **May** | **Stan** | **KC2K** |
| **June** | **Steve** | **WA2BYX** |
| **July** | **Roger** | **K2RRB** |
| **August** | **Judith** | **KC2LTM** |
| **September** | **Chris** | **W2TU** |
| **October** | **Bob** | **N2SU** |
| **November** | **Bob** | **WA2ISE** |
| **December** | **Carol** | **KD2NMV** |

## 2019 *Near and Far Net* Check-Ins (Continued)

| Name | Call |
|---|---|
| **Andrew** | **KC2G** |
| **Kenneth** | **KC2OKR** |
| **Kenny** | **W2KAC** |
| **Fred** | **W2ABE** |
| **Judith** | **KC2LTM** |
| **Tyrell** | **KB2TJK** |
| **Glenn** | **KB2MDR** |
| **Dave** | **N2DEA** |
| **Skip** | **KD2BRV** |
| **Dave** | **WA2SVM** |
| **George** | **W3EH** |
| **Art** | **WA2KXE** |
| **George** | **WB2KQG** |
| **Victor** | **W2RCC** |

## "POP-UP TUESDAYS" HAVE ARRIVED!

**The club will be open – *but not every Tuesday* – from 6:30 – 9:00. Check your email each week for the schedule.**

## Past FLARC Member Profiles

Here is a list of past member features and we welcome your recommendations for new profiles -- including your own.

| Month | Name | Call Sign |
|---|---|---|
| **January 2016** | **Pete** | **KB2BMX** |
| **February** | **Marco** | **KC2ZMA** |
| **March** | **Ron** | **KC2TBD** |
| **April** | **Kai** | **K2TRW** |
| **May** | **Larry** | **WA2ALY** |
| **June** | **Dave** | **N8MAR** |
| **July** | **Steve** | **WI2W** |
| **August** | **Thom** | **W2NZ** |
| **September** | **Brian** | **KD2KLN** |
| **October** | **Brad** | **KM2C** |
| **November** | **Al** | **WA2OWL** |
| **December** | **George** | **W3EH** |
| **January 2017** | **Fred** | **W2ABE** |
| **February** | **Dave** | **KD2MOB** |
| **March** | **Randy** | **WU2S** |
| **April** | **Lee** | **KD2DRS** |
| **May** | **Gene** | **WO2W** |
| **June** | **Carol** | **KD2NMV** |
| **July** | **Kevin** | **KC2KCC** |
| **August** | **Robert** | **KD2NOG** |
| **September** | **Robert** | **KD2BKD** |
| **October** | **John** | **KD2NRS** |
| **November** | **Fred** | **W2AAB** |
| **December** | **Margaret** | **W2GB** |
| **January 2018** | **Brian** | **KD2OAZ** |
| **February** | **Bennett** | **KO2OK** |
| **March** | **Van** | **W2DLT** |
| **April** | **Aly** | **ALØY** |
| **May** | **Bruce** | **NJ2BK** |
| **June** | **Dave** | **N2AAM** |
| **July** | **Karl and Susan** | **W2KBF and W2SKT** |
| **August** | **Steve** | **KA2YRA** |
| **September** | **Paul** | **K2PJC** |
| **October** | **Skip** | **KD2BRV** |
| **November** | **Ed** | **WX2R** |
| **December** | **Tom** | **N2AAX** |

By the way, Randy (WU2S) has compiled a binder of all back issues of *The Resonator* and it's located in the club office.    Thanks Randy!!!

Back issues are also available on our website.
http://newsletters.FairLawnARC.org

## December 2019 Near and Far Net Controls

Here is the roster for net controls for the upcoming month as reported by Brian KD2KLN:

| Date | Net Control |
|---|---|
| **December 2nd** | **KD2KLN** |
| **December 9th** | **KD2MOB** |
| **December 16th** | **WO2W** |
| **December 23rd** | **NP4H** |
| **December 30th** | **You, maybe ?** |

The Near and Far Net now averages close to 20 check-ins on an average week!   Cool beans.

But we need more volunteers to be net controls -- if everyone takes their turn it's less burden on the others. And it's easy.  Volunteer --- don't wait to be asked (unless you really want to be flattered).

## In a Nutshell

Winter is upon us, so it is time to hibernate in the shack, get on the radio and rag chew or make contacts with others. It is also the time to warm up the soldering iron and get to those long awaited projects sitting on the shelf or on your bench. The biggest thing is safety, whether in the shack or on the road – on the radio, or just driving.

A tip: slowing down on the highway from 75 to 65mph can save you almost ten percent on your gas bill and you will get ‘there’ only a few seconds later. Remember every time you accelerate or brake, you are costing yourself dollars that could go to that new radio or tuner, etc!

Keep warm and safe so you can again be involved in all of the many activities that the Fair Lawn Amateur Radio Club is involved in! A special thanks to all of the members that have spent time and resources to make the club the best in the state. If you read this and are not active, get Radio Active!

Fred Wawra,   W2ABE, 73.

## Be "The Boss" For An Hour – Become A Net Control Operator for the W2NPT "Near And Far" Net!

What is the "Near and Far Net"?

It's a get-together on-the-air to chat about stuff!

It takes place on Monday nights at 8pm (eastern local time) on the W2NPT repeater (145.47Mhz, 600kHz negative shift, PL 167.9). You do NOT need to be able to hit the repeater to participate, heck you don't even need a radio (although you will need a call-sign).

You can connect to the net via ECHOLINK (on your computer or cell-phone) and you can even run the net as a net controller via Echolink. So, do not be held back by any preconceived notions, we welcome everyone into the net and *if* you do wish to run the net, we can provide you with everything you'll need to comfortably perform that function.

So join us on Mondays at 8pm, and if you wish to sign up for Net-Control, for *any* Monday of 2020, contact KD2KLN@ARRL.NET

Ed WX2R has just returned from Europe -- he tells us that this is the antenna he arranged to have delivered to FLARC!

## Congratulations!

Pete (KD2BMX) reports the results of the November 8, 2019 FLARC VEC Amateur Radio Exam Sessions:

**Total Number of Candidates served: 2**
**Congrats to all – both passed!!**

| Name | Call | License Earned |
|---|---|---|
| Charles M Cebula | AC2ZU | Extra |
| Robert H. Marchini | KD2SOG | General |

## Want To Help Set The Direction of FLARC for 2020?

Now is the time to begin thinking about what 2020 will mean for the club. The annual member survey is the starting point for measuring ideas and interests and now is the time to get your input into the member agenda.

If you have questions that you want to ask about the direction of the club, now is the time to do it. Send any topics or questions you want see answered to Ed WX2R at wx2r@arrl.net and he'll work them into the 2020 member survey which will arrive in your mailbox on or about **December 1**—a month earlier than previous years.

This year's input included special events, the voluntary donation fund, and opening the club beyond Friday nights. Great feedback from NJ'S fastest growing club.

2020 will be here before you know it.

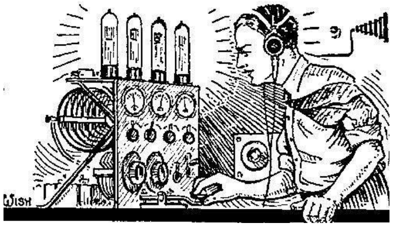


Image from May, 1926 QST, courtesy ARRL

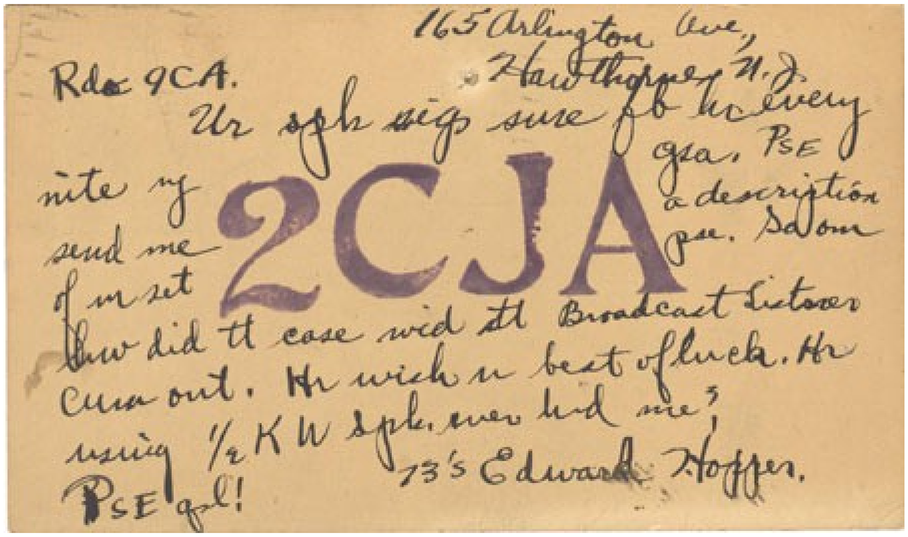
# The Way We Were --

***By Fred Belghaus W2AAB***

## Local Hams in the 1920's: A QSL Gallery

I had intended in this month's column to provide a list of the earliest amateur operators in the local area, based on listings in the Wireless Blue Books of 1909 through 1911, with as many personal details of their lives that I could discover. But this has turned out to be a daunting project. There are very few online records available to complete such a project in a short time, so I will have to postpone that list and the details about those early amateurs for another column. This month, we will look at the QSL cards of some local amateurs from the 1920s. QSLs are, after all, personal and accurate windows to our history and the people that made it.

Our first is from 2CJA, Ed Hopper of Hawthorne in 1922, running a half kilowatt spark. Ed's later call was W2GT, and he became famous as the author of the Award hunters' column for *CQ Magazine* for many years.



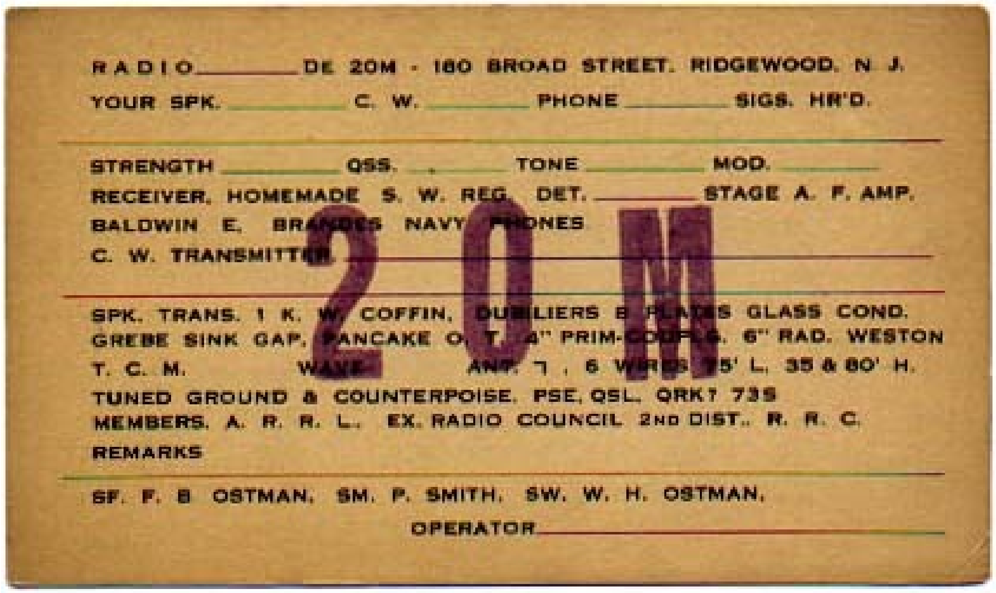
165 Arlington Ave,
Hawthorne, N.J.
Rdo 9CA.
Ur spk sigs sure fb hr every
nite ng qsa, PSE
send me a description
of ur set qu. Sd om
2CJA
How did tt case wid tt Broadcast Listener
Cum out. Hr wish u best of luck. Hr
using ½ KW spk. ever hrd me?
PSE qsl! 73's Edward Hopper.

Like many other cards in those days, Ed's card was a simple one, rubber stamped onto a postcard, with handwritten details. In subsequent years, Ed moved to Rochelle Park, and remained very active and a proud member of the North Jersey DX Association, the club that operates the incoming DX QSL Bureau.

In Ridgewood, where there were quite a few hams in those days, we have 2OM, operating spark in 1922. There were three operators at this station, identified by their operator's "sine." The "sine" was a pair of initials to identify the person at the key. The operators were F.B. Ostman, operator "BF," P. Smith, operator "SM," and W. H. Ostman, operator "SW."

A detailed online article about this early local station can be found referenced in Note [1] below.

## The Way We Were



RADIO ________ DE 2OM - 160 BROAD STREET. RIDGEWOOD. N. J.
YOUR SPK. ________ C. W. ________ PHONE ________ SIGS. HR'D.

STRENGTH ________ QSS. ________ TONE ________ MOD. ________
RECEIVER. HOMEMADE S. W. REG. DET. ________ STAGE A. F. AMP.
BALDWIN E. BRANDES NAVY PHONES
C. W. TRANSMITTER ________

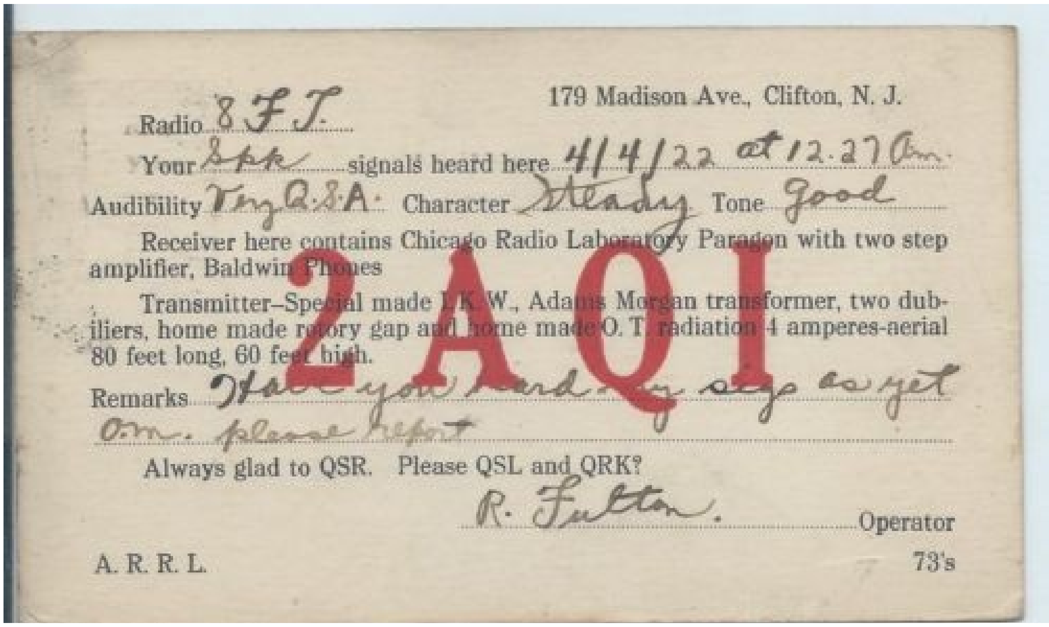
SPK. TRANS. 1 K. W. COFFIN, DUBILIERS 8 PLATES GLASS COND.
GREBE SINK GAP, PANCAKE O. T. 4" PRIM-COUPLE. 6" RAD. WESTON
T. C. M. WAVE ANT. 7, 6 WIRES 75' L. 35 & 80' H.
TUNED GROUND & COUNTERPOISE. PSE. QSL. QRK? 73S
MEMBERS. A. R. R. L. EX. RADIO COUNCIL 2ND DIST., R. R. C.
REMARKS

SF. F. B OSTMAN. SM. P. SMITH. SW. W. H. OSTMAN.
OPERATOR ________

2OM

Down in Clifton, 2AQI, operated by R. Fulton, operated a 1 KW spark rig using an Adams-Morgan high voltage transformer. Adams-Morgan (commonly known as AMCO) was in Upper Montclair. One of their keys was featured in our last column. The "dubiliers" mentioned on the card refer to Dubilier (later Cornell-Dubilier) high voltage capacitors. His rotary spark gap was homemade, with a homemade "O.T." (Oscillation Transformer), consisting of a pair of inductors. His antenna was 80 feet long and 60 feet high, and the transmitter put 4 Amperes into the antenna (as measured on a hot-wire RF Ammeter). His receiver was a C.R.L. (Chicago Radio Laboratory) "Paragon," with "two step amplifier" (2 audio stages) and Baldwin headphones (commonly called "Baldies" in those days).

Here's 2AQI's 1922 QSL card:



179 Madison Ave., Clifton, N. J.

Radio 8FT.
Your Spk signals heard here 4/4/22 at 12.27 Am.
Audibility Very Q.S.A. Character Steady Tone Good

Receiver here contains Chicago Radio Laboratory Paragon with two step amplifier, Baldwin Phones

Transmitter–Special made 1 K.W., Adams Morgan transformer, two dubiliers, home made rotory gap and home made O.T. radiation 4 amperes-aerial 80 feet long, 60 feet high.

Remarks Have you heard my sigs as yet
O.M. please report

Always glad to QSR. Please QSL and QRK?

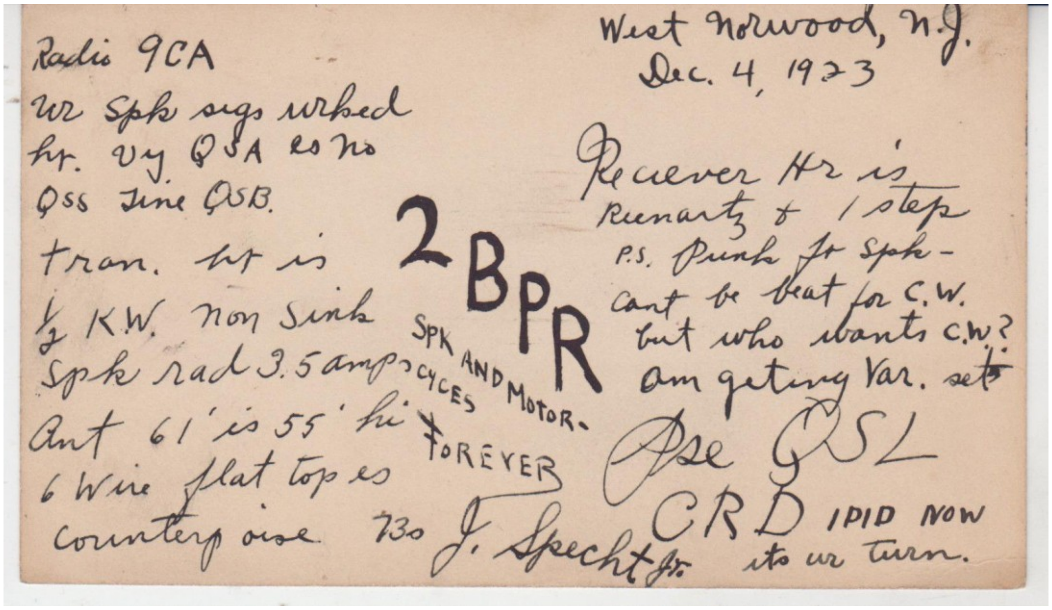
R. Fulton. Operator

A. R. R. L. 73's

2AQI

## The Way We Were

Up in what was then West Norwood (now, just Norwood), there was 2BPR, operated by Julius Specht, Jr., on Tappan Road, who includes on his 1923 QSL the hopeful slogan: "Spark and Motorcycles Forever." Well, at least motorcycles are still around. (Just ask KD2KLN).



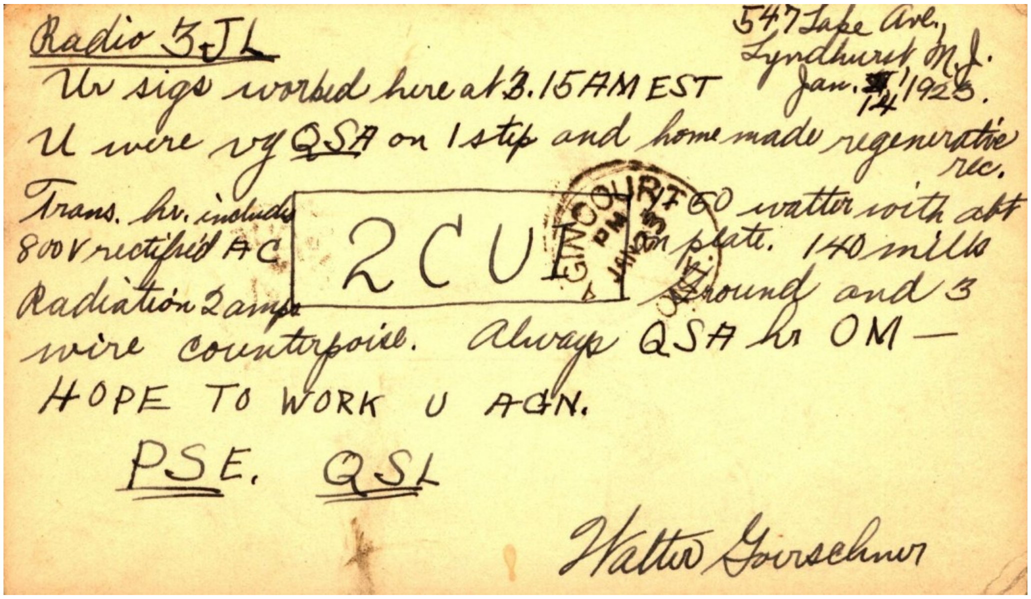
West Norwood, N.J.
Dec. 4, 1923

Radio 9CA
Ur Spk sigs wrked
hr. vy QSA es no
Qss fine QSB.
tran. hr is
1/2 K.W. non Sink
Spk rad 3.5 amps
Ant 61' is 55' hi
6 Wire flat top es
counterpoise 73s J. Specht Jr.

2BPR
SPK AND MOTOR-CYCLES FOREVER

Receiver Hr is
Reinartz & 1 step
P.S. Punk fr Spk -
cant be beat for C.W.
but who wants C.W.?
am geting Var. sets
Pse QSL
CRD 1PID NOW
its ur turn.

Lyndhurst is represented by station 2CUI operated by visiting amateur Ted Sprink, 2BQZ in January 1923, who worked station 3JL (Canada). The rig at 2CUI was a 50 watt (tube) CW rig, and is the earliest local example using CW instead of spark.



547 Lake Ave.,
Lyndhurst N.J.
Jan. 14, 1923.

Radio 3JL
Ur sigs worked here at 3.15 AM EST
U were vy QSA on 1 step and home made regenerative rec.
Trans. hr. includes 50 watter with abt
800 V rectified AC on plate. 140 mills
Radiation 2 amps. Ground and 3
wire counterpoise. Always QSA hr OM —
HOPE TO WORK U AGN.

PSE. QSL

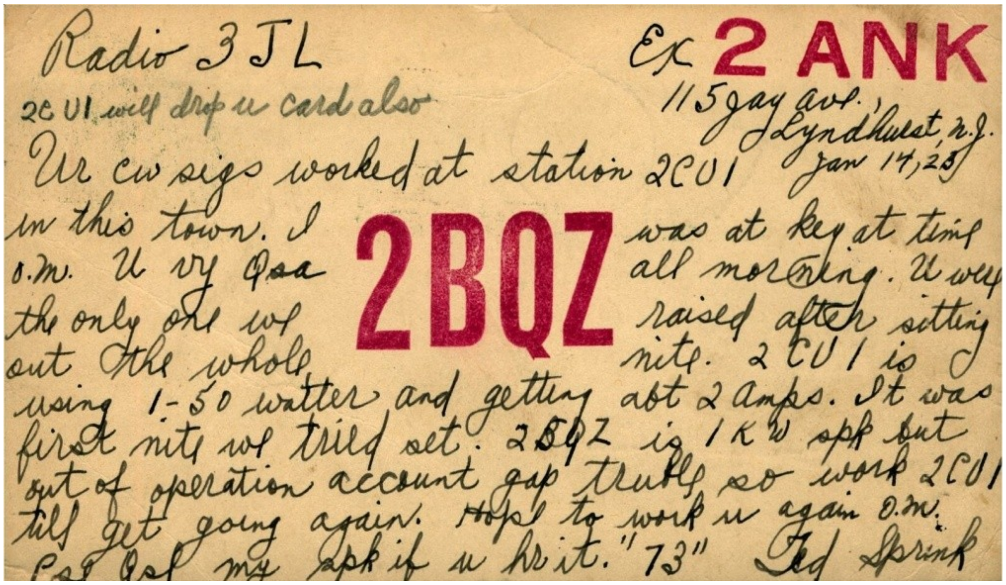
2CUI

GINCOURT P.M. JAN ONT.

Walter Goerschner

## The Way We Were

Chief operator Walter Goerschner used a homemade regenerative receiver with “one step,” meaning a detector and only a one tube audio stage, yet 3JL was “VY QSA,” meaning that he had a very strong signal. Operator Ted Sprink, 2BQZ also sent his own QSL for this QSO, with further comments.



Radio 3JL

Ex 2 ANK

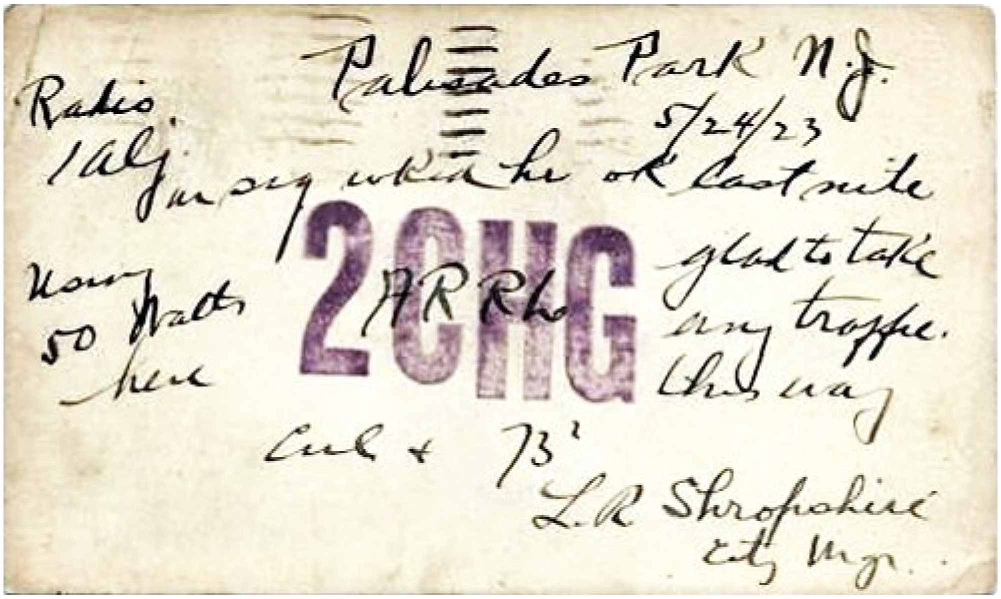
115 Jay ave.,
Lyndhurst, N.J.
Jan 14, 23

2CUI will drop u card also

2BQZ

Ur cw sigs worked at station 2CUI in this town. I was at key at time o.m. U vy QSA all morning. U were the only one we raised after sitting out the whole nite. 2CUI is using 1-50 watter and getting abt 2 amps. It was first nite we tried set. 2BQZ is 1 KW spk but out of operation account gap truble so work 2CUI till get going again. Hope to work u again o.m. Pse QSL my spk if u hr it. "73" Ted Sprink

Our next example from 1923 comes from station 2CHG, operated in Palisades Park by Lee R. Shropshire.



Palisades Park N.J.
5/24/23

Radio
1ALJ ur sig wkd here ok last nite

2CHG

ARRL

Now 50 watts here

glad to take any traffic this way

Cul + 73'

L.R Shropshire
City Mgr.

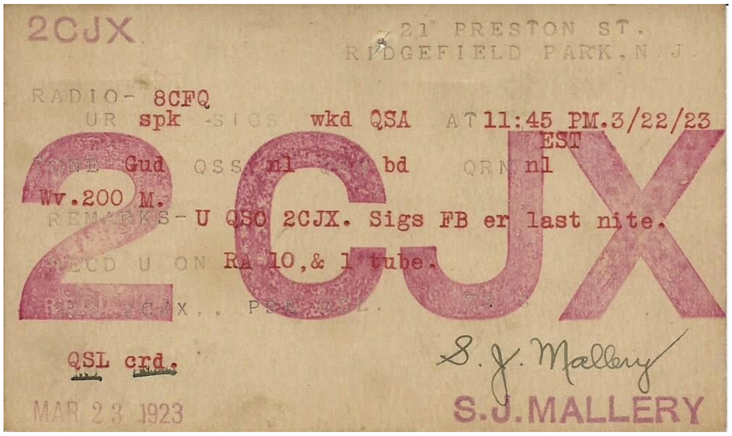
Shropshire operated a 50 watt CW station, and states that he is “glad to take any traffic this way.” Much of the amateur activity in those days was handling third party messages.

## The Way We Were

Another local 1920s station was 2CJX in Ridgefield Park, operated by S.J. (Sherman J.) Mallery. Mallery remained an active amateur as W2CJX for many years thereafter.

Below is a non-QSO QSL card. It was sent by Mallery in March 1923, to station 8CFQ, located in Freemont, Michigan, who was running 150 watts, according to Government records. [2]

It was not uncommon for amateurs in those days to send SWL reports to other amateurs, just to tell them that they were being heard at a distant QTH. Incidentally, 8CFQ was transmitting with spark, which was becoming scarce on the amateur bands by that time. According to census records, Mallery was an Episcopalian, born in 1903. [3]



2CJX

21 PRESTON ST.
RIDGEFIELD PARK, N.J.

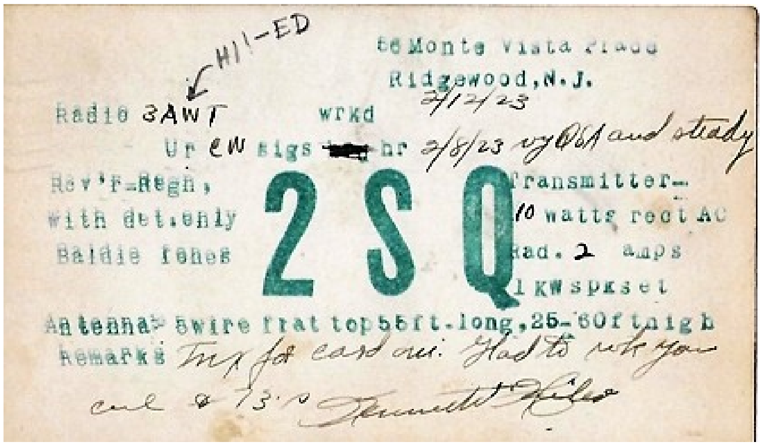
RADIO- 8CFQ
UR spk SIGS wkd QSA AT 11:45 PM.3/22/23 EST
TONE Gud QSS nl QRM bd QRN nl
Wv.200 M.
REMARKS- U QSO 2CJX. Sigs FB er last nite.
RECD U ON RA 10,& 1 tube.
RPRT 2CJX.. PSE QSL. 73
QSL crd.

MAR 23 1923

2CJX

S.J. Mallery
S.J.MALLERY

Here's another Ridgewood station, 2SQ, operated by J. Kenneth Hiler in 1923:



HI!-ED

66 Monte Vista Place
Ridgewood, N.J.
2/12/23

Radio 2AWT wrkd
Ur CW sigs hr 2/8/23 vy QSA and steady
Rec'r-Regn, with det. only Baldie fones
Transmitter— 10 watts rect AC
Rad. 2 amps
1 KW spk set

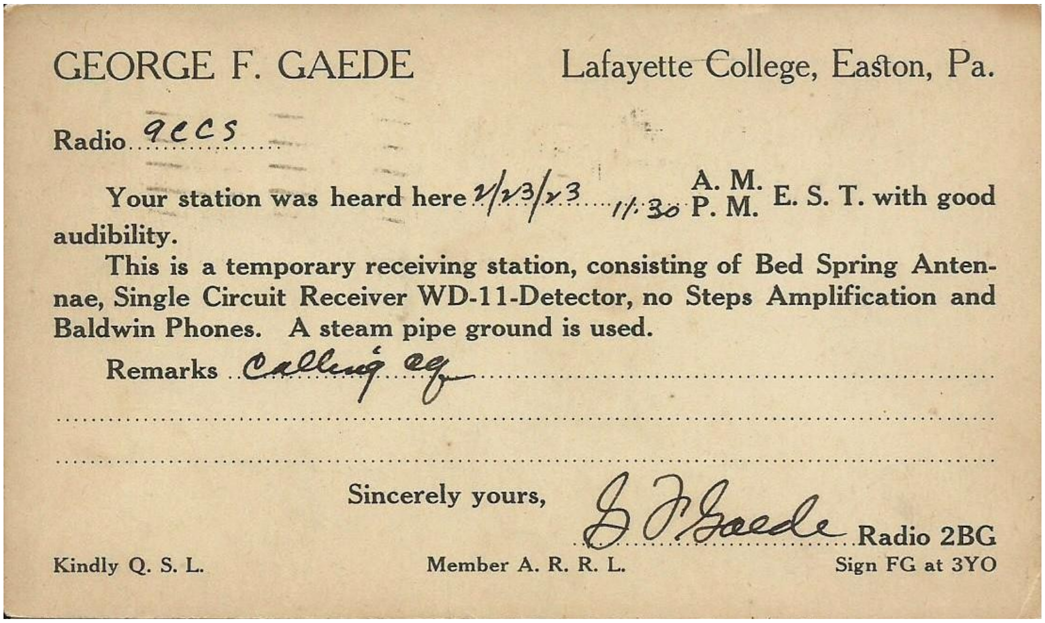
2SQ

Antenna 5 wire flat top 55 ft. long, 25-60 ft high
Remarks Tnx for card ole. Glad to wk you
card & 73's Kenneth Hiler

Although Hiler had a 1 KW spark rig, he was operating a 10 watt CW transmitter, delivering 2 Amperes into his 5 wire flat-top antenna, "55 feet long and 25 and 60 feet high," which I interpret to mean that the 5 wire radiating element was 60 feet high, with a 25 foot high counterpoise beneath it. The use of counterpoises was common practice in those days, before the simple half wave dipole came to replace the multi-wire flat-tops. His receiver was a simple regenerative detector with no audio amplification stage. Hiler remained active for many years as W2SQ, and there were at least 2 other Hilers active from Ridgewood as late as the 1970s.

## The Way We Were

Here's an unusual card from station 2BG, also from 1923. Operator George Gaede was then licensed to "Pompton Road, Paterson" [3] which was probably actually Wayne, NJ, whose mail was handled through the Paterson Post Office. But the card is from when Gaede was at Lafayette College in Easton, PA.



GEORGE F. GAEDE Lafayette College, Easton, Pa.

Radio 9CCS

Your station was heard here 2/23/23 11:30 A. M. P. M. E. S. T. with good audibility.

This is a temporary receiving station, consisting of Bed Spring Antennae, Single Circuit Receiver WD-11-Detector, no Steps Amplification and Baldwin Phones. A steam pipe ground is used.

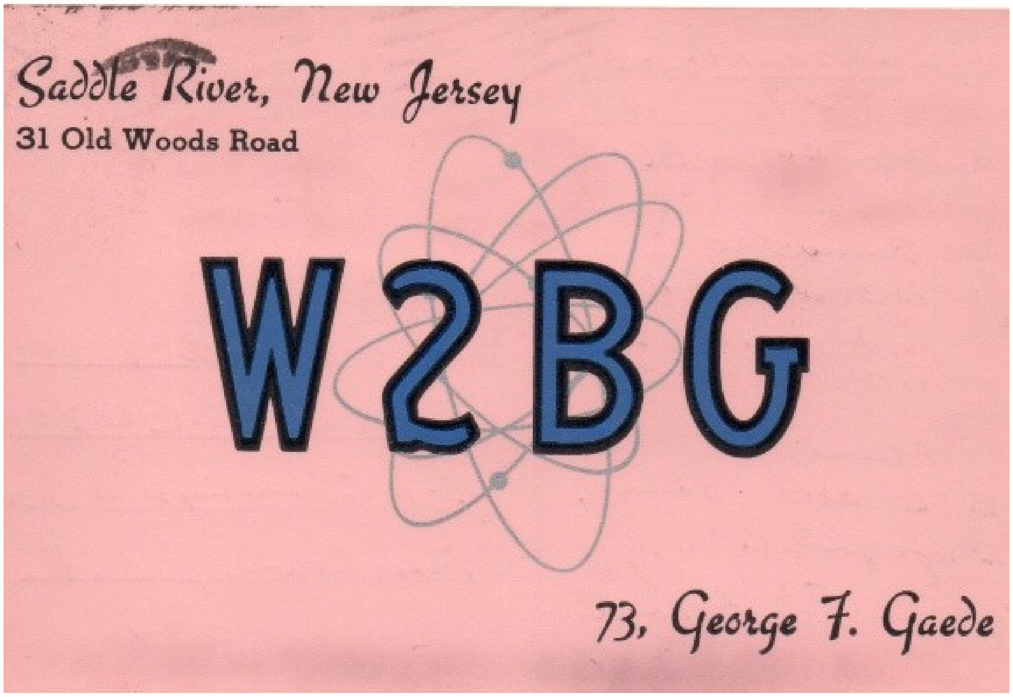
Remarks Calling cq

Sincerely yours,

G F Gaede Radio 2BG

Kindly Q. S. L. Member A. R. R. L. Sign FG at 3YO

Evidently unable to operate a transmitter from his dorm, he set up a receiving station only, using a "Single circuit receiver" with a WD-11 detector (early triode) with no further AF amplification, similar to the receiving set-up used by 2SQ, above. His antenna was a bed spring, and ground was provided by a steam pipe. Gaede was a very active amateur as W2BG for many years, especially after his move to Saddle River. I never worked him, but he was frequently on 80 meter CW in the 1960s and early '70s. Here's his card from 1964:



Saddle River, New Jersey

31 Old Woods Road

W2BG

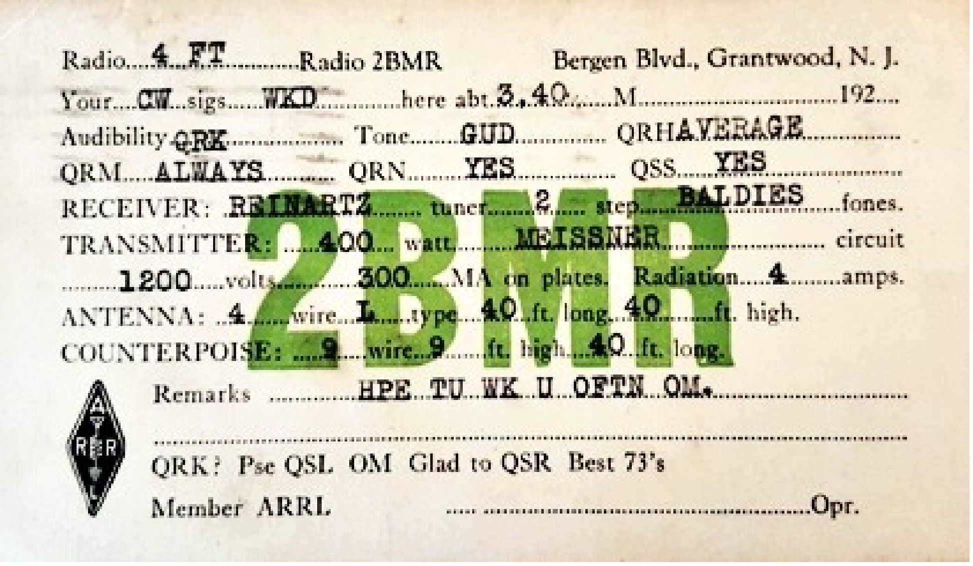
73, George F. Gaede

## The Way We Were

Our journey back in time now takes us to the year 1924 and to the interesting unincorporated community of Grantwood, now considered part of Cliffside Park.

Grantwood was formed by the Grantwood Heights Land Company in 1900, between Cliffside Park and Ridgefield, just south of Fort Lee. Some of this land would later become part of Palisades Amusement Park. In 1913, it became an artist's colony established by Man Ray and Samuel Halpert – a collective of artists known as the "Others" – and started out as a number of "clapboard shacks on a bluff." It also had a role in the early movie industry. The E.K. Lincoln movie studio was established there in 1915, and was still making movies until the late 1920s. [4]

The QSL is from station 2BMR, operated by George Sullivan Watson, according to the U.S. Government call book. [5] His receiver was a Reinartz Tuner (developed by John Reinartz, 1QP) with 2 audio stages, and his transmitter was a Meissner circuit running 400 watts on CW. The antenna was a 4 wire "L" 40 feet long and 40 feet high, with a 9 wire counterpoise, 40 feet long and 9 feet high.



Radio....4 FT..........Radio 2BMR Bergen Blvd., Grantwood, N. J.
Your....CW...sigs......WKD..........here abt. 3,40.......M..........................192....
Audibility QRK.................. Tone.........GUD.............. QRH AVERAGE..............
QRM.....ALWAYS.......... QRN.........YES................ QSS.....YES....................
RECEIVER: REINARTZ........ tuner........2...... step........BALDIES..........fones.
TRANSMITTER: .....400.... watt.........MEISSNER........................ circuit
.........1200.....volts........300.....MA on plates. Radiation.....4........amps.
ANTENNA: ...4.....wire....L.....type....40...ft. long....40..........ft. high.
COUNTERPOISE: .....9....wire...9.........ft. high.....40....ft. long.
2BMR
Remarks ..............HPE TU WK U OFTN OM...........................................
..........................................................................................................
QRK? Pse QSL OM Glad to QSR Best 73's
Member ARRL ..... ..............................................................Opr.

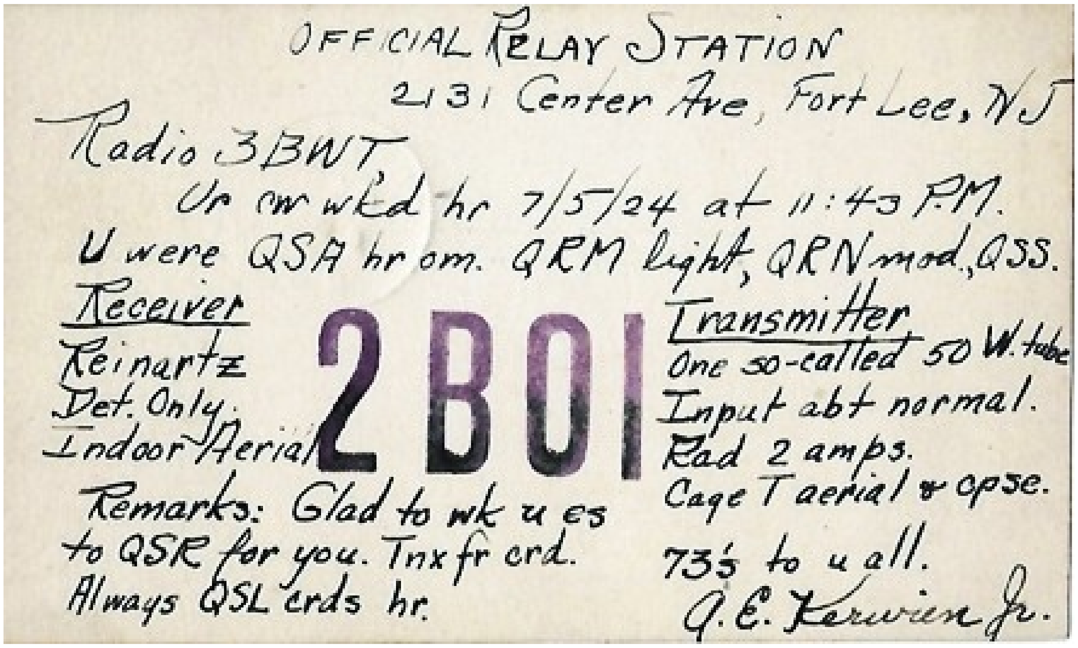
One of Watson's near-neighbors was 2BOI in Fort Lee, operated by Arthur Eugene Kerwin, Jr. [6] Kerwin was an Official Relay Station (ORS), part of the A.R.R.L.'s message handling system. His transmitter was 50 watts CW, radiating 2 Amperes into a multi-wire cage antenna in "T" configuration with a counterpoise.

Once again, the receiver used was a Reinartz Tuner circuit, using a detector only, with no further audio amplification, and a separate indoor receiving antenna.

The comment on the card "Always glad to QSR for you" was a way of saying that he'd be glad to handle messages for the station worked. The "Q" signals used by amateurs have changed somewhat over the years, though. Nowadays, we would say "Always glad to QSP for you," meaning our willingness to relay messages.

## The Way We Were

Here’s 2BOI’s 1924 QSL card:



OFFICIAL RELAY STATION
2131 Center Ave, Fort Lee, N.J.
Radio 3BWT
Ur cw wkd hr 7/5/24 at 11:43 P.M.
U were QSA hr om. QRM light, QRN mod, QSS.

Receiver
Reinartz
Det. Only.
Indoor Aerial

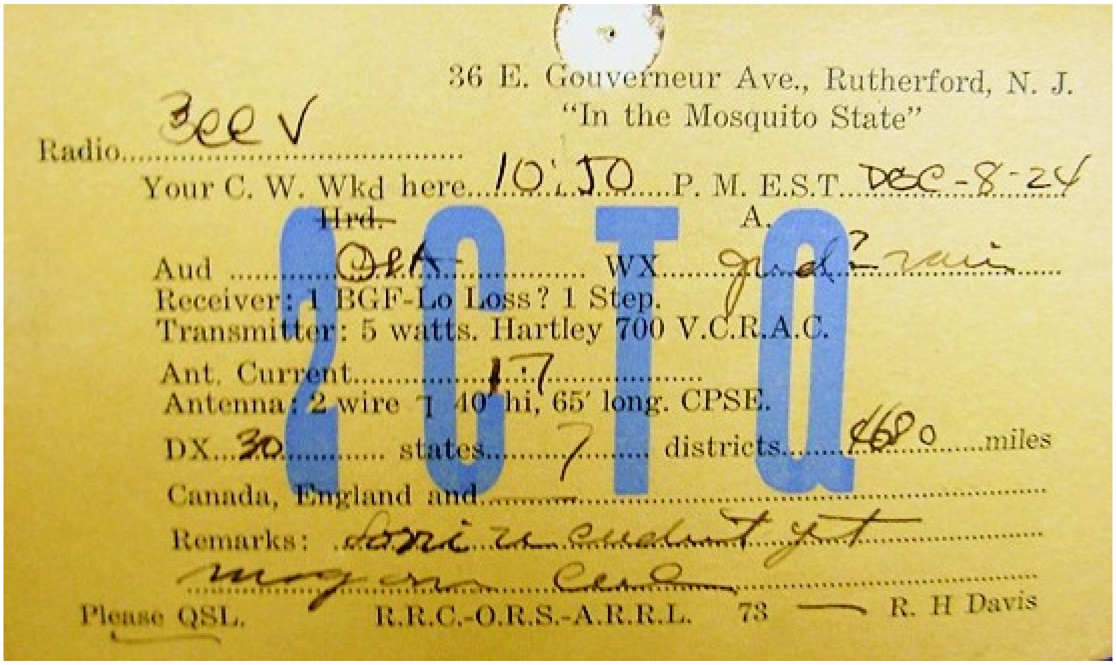
2BOI

Transmitter
One so-called 50 W. tube
Input abt normal.
Rad 2 amps.
Cage T aerial & cpse.

Remarks: Glad to wk u es to QSR for you. Tnx fr crd. Always QSL crds hr.

73’s to u all.
G.E. Kerwien Jr.

In Rutherford, another early hotbed of ham activity, there was 2CTQ, operated by R.H. (Richard Harding) Davis, in 1924. His card identifies New Jersey as “The Mosquito State.” (All too true).



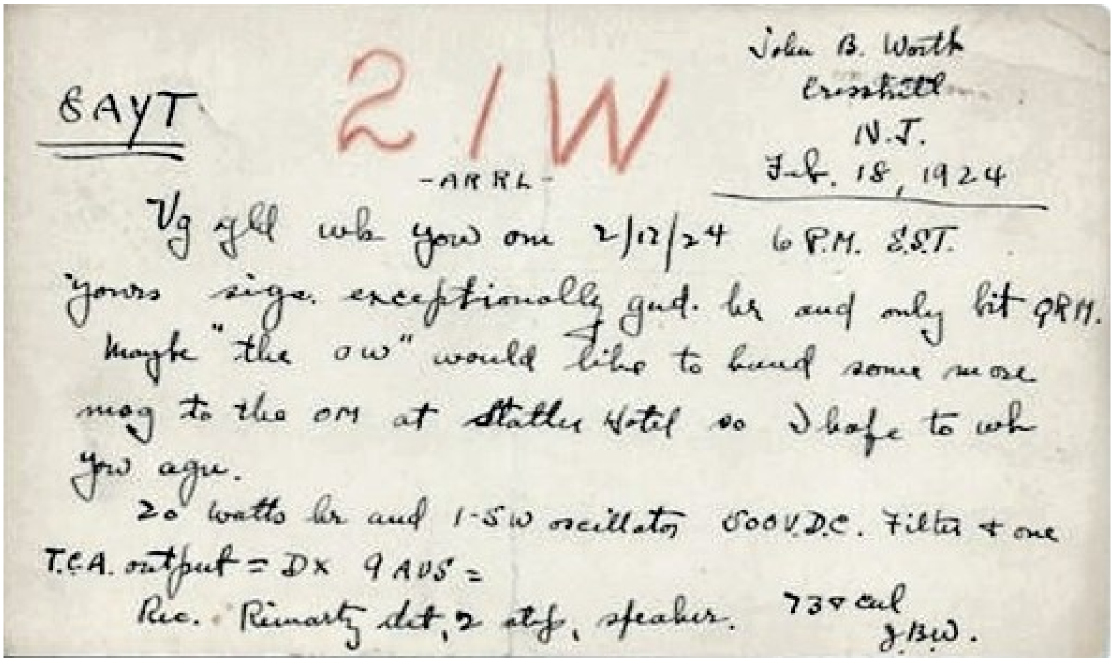
36 E. Gouverneur Ave., Rutherford, N. J.
“In the Mosquito State”

2CTQ

Radio 3ee ✓
Your C. W. Wkd here 10:50 P. M. E.S.T. DEC-8-24
~~Hrd.~~ A.
Aud OK WX gd? rain
Receiver: 1 BGF-Lo Loss? 1 Step.
Transmitter: 5 watts. Hartley 700 V.C.R.A.C.
Ant. Current 1.7
Antenna: 2 wire T 40′ hi, 65′ long. CPSE.
DX 30 states 7 districts 680 miles
Canada, England and
Remarks: sorri u cudnt get my crd
Please QSL. R.R.C.-O.R.S.-A.R.R.L. 73 — R. H Davis

Davis ran only 5 watts from a Hartley oscillator with a "low loss" 1BGF Tuner and no audio stage. 1BGF was the call of the designer of this regenerative receiving circuit, also quite popular in the early to mid 1920s. Davis was named after the once popular journalist and novelist, best known for his work as a war correspondent in the Boer and Spanish American Wars, friend and rival of poet Stephen Crane, while Crane worked in a similar capacity in Cuba. 2CTQ's card identifies the operator as a member of the Rutherford Radio Club, A.R.R.L., and holder of the Official Relay Station appointment for handling message traffic.

Station **2IW** was located in Cresskill. Operator John B. Worth ran 20 watts CW, and was listed in *QST Magazine*'s first issue in 1915 on a list of the earliest A.R.R.L. members. Here's his 1924 handmade QSL card.



8AYT

2IW

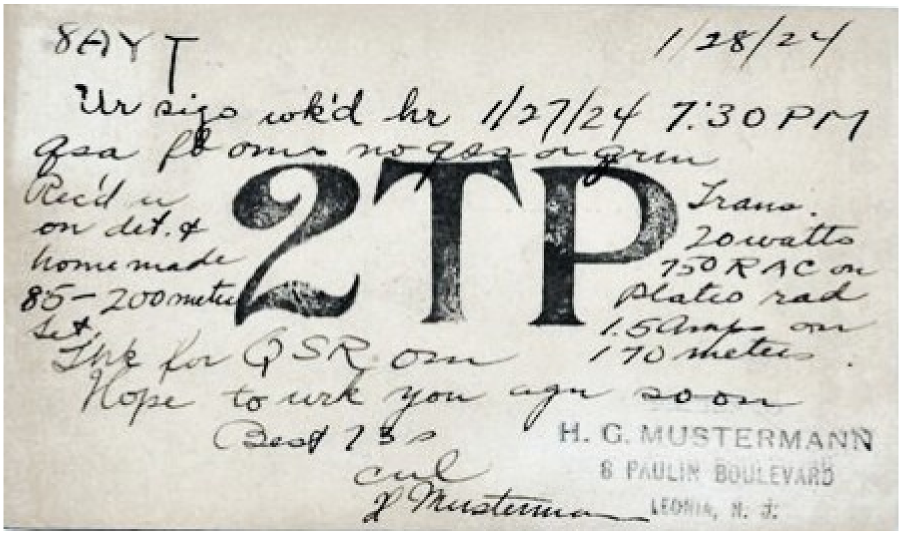
-ARRL-

John B. Worth
Cresskill
N.J.
Feb. 18, 1924

Vy gld wk you on 2/12/24 6 P.M. E.S.T.
Yours sigs. exceptionally gud. hr and only bit QRM.
Maybe "the ow" would like to hand some more
msg to the om at Statler Hotel so I hope to wk
you agn.
20 watts hr and 1-5W oscillator 500 V.D.C. Filter + one
T.C.A. output = DX 9ADS =
Rec. Reinartz det, 2 stf, speaker. 73 & cul
J.B.W.

The note "T.C.A. output" apparently means that his antenna current was measured on a Thermocouple-type RF Ammeter, as opposed to the more usual, and less accurate "hot-wire" Ammeter in common use then. His receiver was yet another Reinartz circuit, but with 2 audio stages, providing enough output to drive a loudspeaker, another rarity in those days, since most hams only used headphones. His "DX" listed was station 9ADS, which was located in St. Paul, Minnesota. [7]

From Leonia, there was station 2TP, operated by H.G. (Herman G.) Mustermann in 1924. His QSL states that he was running 20 watts CW with 700 volts of "Raw A.C." on the plate of his oscillator tube. "Raw A.C." was common in those days, before filtered D.C. power supplies. If you wonder what these CW "notes" sounded like with no filtering, think of a buzz saw.



8AYT

1/28/24

Ur sigs wk'd hr 1/27/24 7:30 PM
qsa fb omr no qsa agn

Rec'd u
on det. &
home made
85–200 meter
set

2TP

Trans.
20 watts
750 RAC on
plates rad
1.5 Amps on
170 meters.

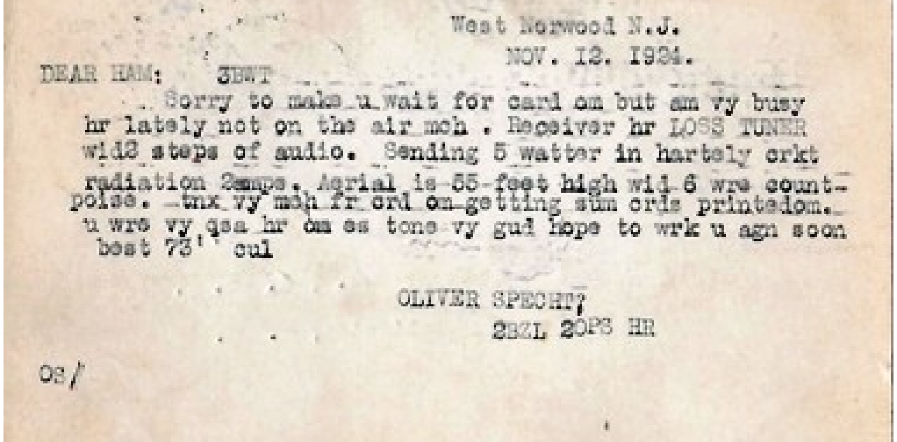
Tnx for QSR om
Hope to wrk you agn soon
Best 73s
cul
H. Musterman

H. G. MUSTERMANN
8 PAULIN BOULEVARD
LEONIA, N. J.

"Musty" as he was commonly called the remainder of his life, used a simple detector-only receiver in 1924 that tuned 85 to 200 Meters (1500 to 3500 kHz). His transmitter radiated 1.5 Amperes on 170 meters (1764.7 kHz). He was later another serious and well-known DX'er, as well as a prominent member of the North Jersey DX Association.

Here's an interesting card from November, 1924. It is from station 2BZL of (West) Norwood. The station was operated by Oliver (Ellsworth) Specht. If the name Specht rings a bell, see the card from 2BPR earlier in this column. The call book lists the address for both Spechts as Tappan Road, so they were obviously relatives. But although 2BPR was licensed for 990 watts, 2BZL was licensed for only 18 watts. [8]

2BZL was running a Hartley oscillator circuit using a 5 watt tube, so his output was probably less than half that. Receiver is described as a "loss tuner" with 2 audio stages, and the antenna was 55 feet high with a 6 wire counterpoise.



West Norwood N.J.
NOV. 12. 1924.

DEAR HAM: 3BWT

Sorry to make u wait for card om but am vy busy hr lately not on the air mch . Receiver hr LOSS TUNER wid2 steps of audio. Sending 5 watter in hartely crkt radiation 2amps. Aerial is 55 feet high wid 6 wre count-poise. tnx vy mch fr crd om getting sum crds printedom. u wre vy qsa hr om es tone vy gud hope to wrk u agn soon best 73'' cul

OLIVER SPECHT,
2BZL 2OPS HR

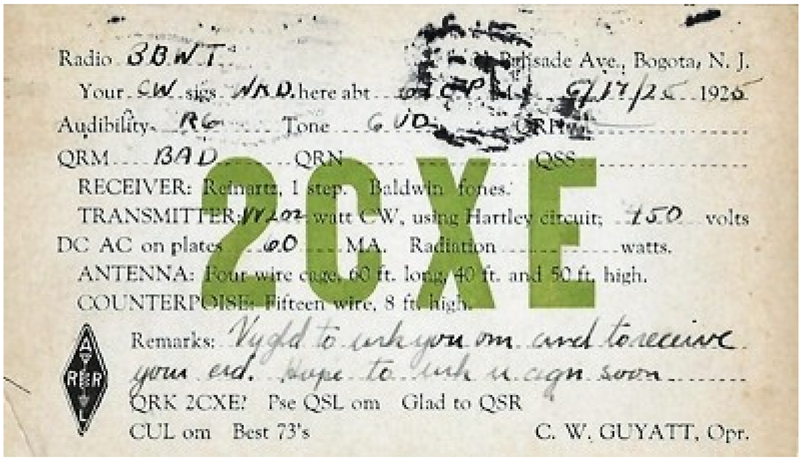
OS/

## The Way We Were

We move onward to the year 1925, with this example from Bogota. The station call was 2CXE, and the operator was C.W. Guyatt. The receiver was another Reinartz Tuner with one audio amplifier stage and Baldwin headphones.

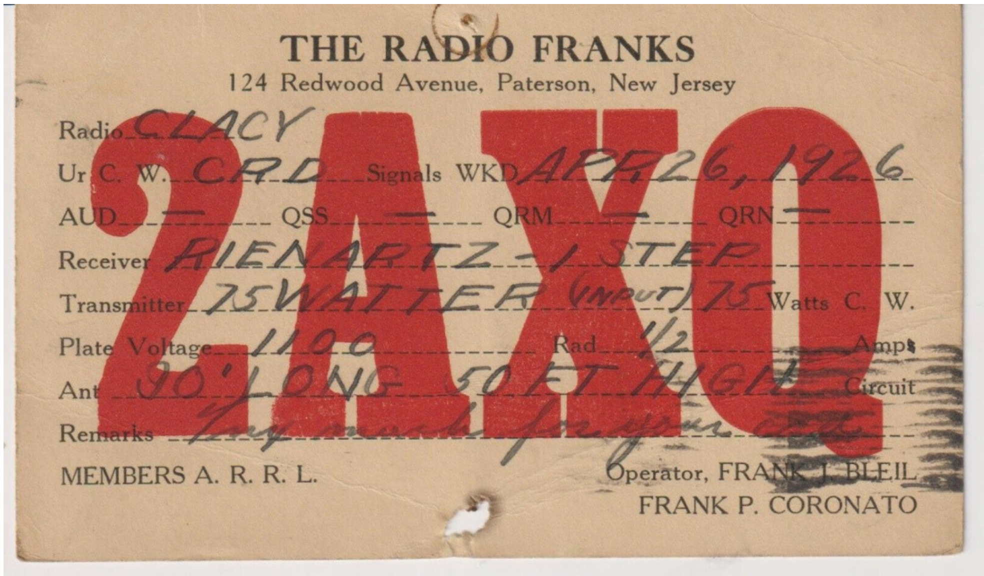
The transmitter used a single UV202 with 450 volts on the plate, operating at a plate current of 60 milliamps. That calculates to an input of 27 watts, but we can only guess at the probable output power. Early tubes like the UV202 were notoriously inefficient as a transmitting device. The antenna was a 4 wire "cage" type, "40 feet and 50 feet high," with a 15 wire counterpoise, 8 feet high.

Here's the QSL from 2CXE:



Radio 3BWT [illegible] Palisade Ave., Bogota, N. J.
Your CW sigs WKD here abt [illegible] 9/17/25 1925
Audibility R6 Tone GUD QRH
QRM BAD QRN QSS
RECEIVER: Reinartz, 1 step. Baldwin fones.
TRANSMITTER: UV202 watt CW, using Hartley circuit; 450 volts
DC AC on plates 60 MA. Radiation watts.
ANTENNA: Four wire cage, 60 ft. long, 40 ft. and 50 ft. high.
COUNTERPOISE: Fifteen wire, 8 ft. high.
Remarks: Vy gld to wkh you om and to receive you crd. Hope to wkh u agn soon
QRK 2CXE! Pse QSL om Glad to QSR
CUL om Best 73's
C. W. GUYATT, Opr.

The City of Paterson is represented by this card from station 2AXQ in 1926:

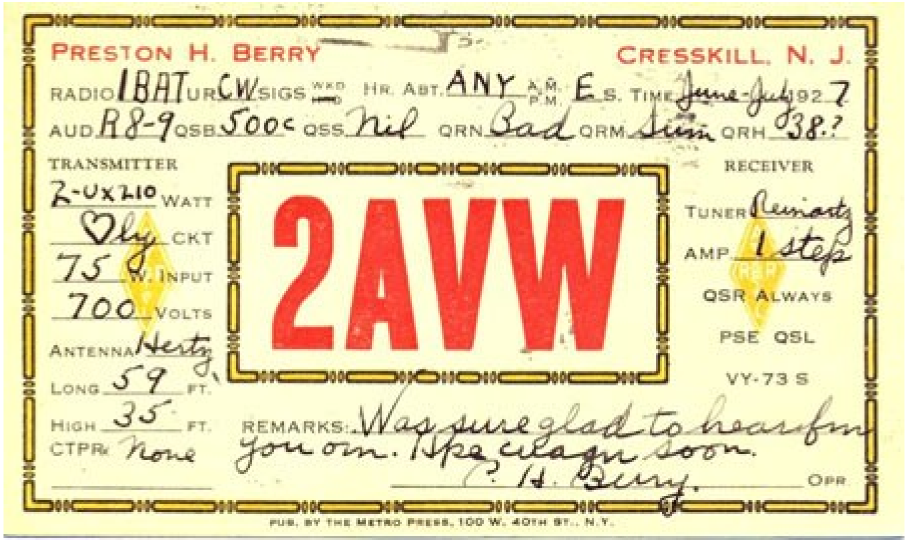


THE RADIO FRANKS
124 Redwood Avenue, Paterson, New Jersey
Radio CLACY
Ur C. W. CRD Signals WKD APR 26, 1926
AUD — QSS — QRM — QRN —
Receiver RIENARTZ - 1 STEP
Transmitter 75 WATTER (INPUT) 75 Watts C. W.
Plate Voltage 1100 Rad 1/2 Amps
Ant 90' LONG 50 FT HIGH Circuit
Remarks Tnx much for your crd
MEMBERS A. R. R. L.
Operator, FRANK J. BLEIL
FRANK P. CORONATO

## The Way We Were

Licensee and Chief Operator was Frank J. Bleil, assisted by second operator Frank P. Coronato. The station ran a 75 watt CW rig with 1100 volts on the plate. Receiver was a Reinartz Tuner with one stage of audio amplification, and the antenna was 90 feet long and 50 feet high. Bleil continued to be licensed in Paterson as W2AXQ for some years after this.

This card from 2AVW in Cresskill dates from 1927. Operator Preston H. Berry ran 700 volts on a pair of UX-210s in a Hartley oscillator circuit at 75 watts input. Receiver was a Reinartz Tuner with one audio stage. The antenna was an end-fed Hertz 59 feet long and 35 feet high.



PRESTON H. BERRY CRESSKILL, N. J.

RADIO 1BAT UR CW SIGS WKD HR. ABT. ANY A.M./P.M. E.S. TIME June-July 1927

AUD R8-9 QSB 500c QSS Nil QRN Bad QRM Sum QRH 38.?

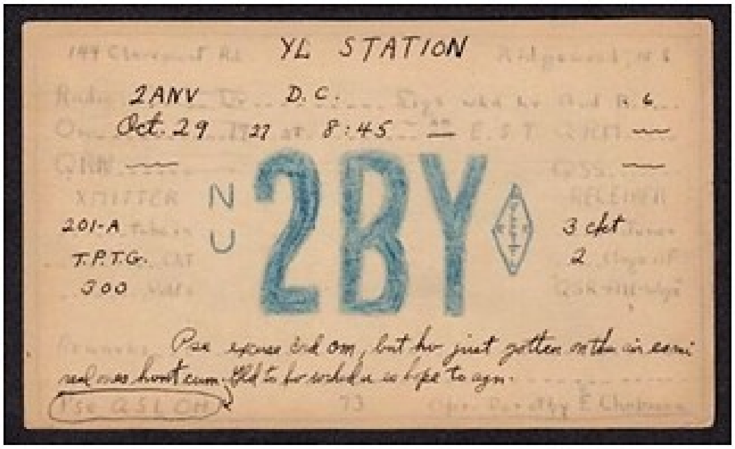
TRANSMITTER
2-UX210 WATT
Hly CKT
75 W. INPUT
700 VOLTS
ANTENNA Hertz
LONG 59 FT.
HIGH 35 FT.
CTPR. None

RECEIVER
TUNER Reinartz
AMP 1 step
QSR ALWAYS
PSE QSL
VY-73 S

REMARKS: Was sure glad to hear fm you om. Hpe cuagn soon.
P. H. Berry. OPR

PUB. BY THE METRO PRESS, 100 W. 40TH ST., N.Y.

Station 2BY in Ridgewood was mentioned in a previous column. It was operated by Miss Dorothy Chapman, one of the first, if not *the* first female operator in the area. Here's her 1927 card:



YL STATION

2ANV D.C.
Oct. 29 27 8:45

201-A
T.P.T.G.
500

3 ckt
2

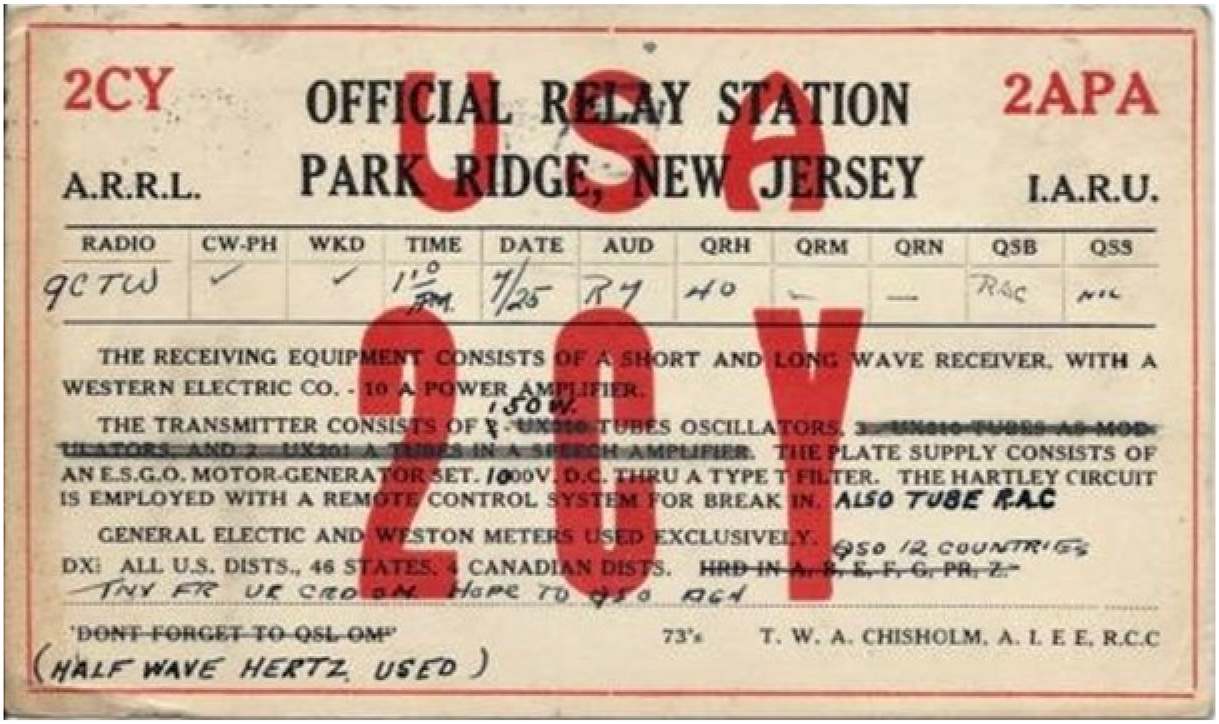
Pse excuse [illegible] om, but hv just gotten on the air [illegible]
[illegible] to agn.

Pse QSL OM

73

In Park Ridge, there was a station with two call signs, 2CY and 2APA, operated by T.W.A. Chisholm in 1927. Chisholm was an Electrical Engineer, and member of the American Institute of Electrical Engineers, a professional society that later merged with the Institute of Radio Engineers to form the Institute of Electrical and Electronics Engineers (I.E.E.E.)

## The Way We Were



2CY OFFICIAL RELAY STATION 2APA

A.R.R.L. PARK RIDGE, NEW JERSEY I.A.R.U.

USA 2GY

| RADIO | CW-PH | WKD | TIME | DATE | AUD | QRH | QRM | QRN | QSB | QSS |
|---|---|---|---|---|---|---|---|---|---|---|
| 9CTW | ✓ | ✓ | 1:10 PM | 7/25 | R7 | 40 | – | – | RAC | NIL |

THE RECEIVING EQUIPMENT CONSISTS OF A SHORT AND LONG WAVE RECEIVER, WITH A WESTERN ELECTRIC CO. - 10 A POWER AMPLIFIER.

150 W.

THE TRANSMITTER CONSISTS OF ~~2 - UX210~~ TUBES OSCILLATORS. ~~3 - UX210 TUBES AS MODULATORS AND 2 - UX201 A TUBES IN A SPEECH AMPLIFIER.~~ THE PLATE SUPPLY CONSISTS OF AN E.S.G.O. MOTOR-GENERATOR SET. 1000V. D.C. THRU A TYPE T FILTER. THE HARTLEY CIRCUIT IS EMPLOYED WITH A REMOTE CONTROL SYSTEM FOR BREAK IN. ALSO TUBE RAC

GENERAL ELECTIC AND WESTON METERS USED EXCLUSIVELY. QSO 12 COUNTRIES

DX: ALL U.S. DISTS., 46 STATES. 4 CANADIAN DISTS. ~~HRD IN A, B, E, F, G, PR, Z.~~

TNX FR UR CRD OM HOPE TO QSO AGN

~~"DONT FORGET TO QSL OM"~~ 73's T. W. A. CHISHOLM, A. I. E E, R.C.C

(HALF WAVE HERTZ USED)

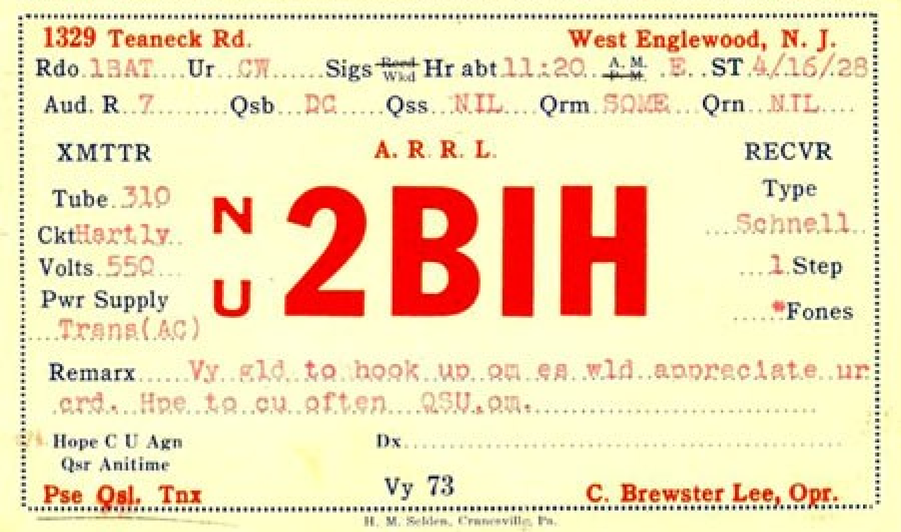
Receivers listed covered long and short waves with a Western Electric (audio) amplifier stage. The transmitter was a remotely controlled Hartley type running 150 watts to a half wave Hertz antenna. "DX" included 46 states in all U.S. Districts (there were 9 call areas in those days), 4 Canadian districts (there were 5 in those days) and 12 DX countries.

1928 was a pivotal year in amateur radio history. For much of that year, there was no official prefix for the United States, or any other country. From the earliest days, most calls consisted of a number followed by two or three letters. Once amateurs started working outside their own national borders, confusion arose as to the location of the station. A simple system was devised, adding first one, then 2 letters ahead of the call. These additional letters were called "intermediates."

First, "U" signified the United States, and "C" signified Canada, and so on. But before long, there were so many countries on the air that this system had to add a second letter to signify first the continent, then the country. In the U.S.A., the "intermediate" was NU. This meant, "North America, United States." Canada was identified as "NC," meaning "North America, Canada," and so on.

## The Way We Were

Here’s one of the last uses of the U.S. intermediate “NU” on a card from station 2BIH, located in West Englewood (actually a part of Teaneck now), in April 1928. On October 1, 1928, the official prefix for the contiguous U.S.A. became W, and for U.S. Possessions, K. The operator at 2BIH was C. Brewster Lee.



1329 Teaneck Rd. West Englewood, N. J.
Rdo 1BAT Ur CW Sigs ~~Rcvd~~ Wkd Hr abt 11:20 A.M. ~~P.M.~~ E. ST 4/16/28
Aud. R 7 Qsb DC Qss NIL Qrm SOME Qrn NIL
XMTTR
Tube 310
Ckt Hartly
Volts 550
Pwr Supply Trans(AC)
A. R. R. L.
NU 2BIH
RECVR
Type Schnell
1 Step
*Fones
Remarx Vy gld to hook up om es wld appreciate ur crd. Hpe to cu often QSU, om.
Hope C U Agn
Qsr Anitime
Dx
Pse Qsl. Tnx
Vy 73
C. Brewster Lee, Opr.
H. M. Selden, Cranesville, Pa.

The transmitter ran 550 volts on the plate of a 310 triode in the ever-popular Hartley oscillator circuit. The 310, incidentally, was a direct equivalent to a 210, but manufactured by Cunningham, under license to R.C.A., which held the patent for the 210 design. The receiver was a regenerative circuit designed by Fred Schnell and published in *QST Magazine*, with one stage of audio amplification. In later years, operator Lee became licensed as W2ADP, whom I worked several times. He used the name “Lee” on the air.

Schnell is an important name in amateur radio history, whose first call was 1MO. He was Communications Manager for the A.R.R.L. from 1920 to 1926, resigning in that year to accept a position with C.F. Burgess Laboratories of Madison, Wisconsin, once a prominent manufacturer of batteries and other electrical devices. Upon his move west, Schnell changed call to 9UZ [9], and in his later years, K6UZ in California.

Fred Schnell was perhaps best known for being the first U.S. amateur to successfully complete a 2-way contact with Europe in 1923. His history-making QSO with French station 8AB was a game changer, inspiring many amateurs to improve their stations enough to enable reliable DX contacts. [10] It was natural that his receiver design would be built by many amateurs, also hoping to bridge the continents in the 1920s.

## The Way We Were

How many hams were there in the Bergen-Passaic County areas in the 1920s? Can you guess which town had the most? It may surprise you. According to the 1926 U.S. Government call book, the first issue that listed amateurs 3 ways: by call, name and town for each state, the following was reported:

Bergen County & Number of Licensees

Allendale = 3
Bergenfield = 3
Bogota = 5
Carlstadt = 1
Cresskill = 2
Edgewater = 1
Englewood = 3
Fairview = 1
Fort Lee (including Coytesville) = 2
Glen Rock = 2
Grantwood (Cliffside Park) = 1
Hackensack = 2
Hasbrouck Heights = 4
Leonia = 1
Lyndhurst = 4
Maywood = 1
Midland Park = 1
Norwood = 1
Palisades Park = 2
Park Ridge = 3
Ramsey = 1
Ridgefield (including Morsemere) = 2
Ridgefield Park = 8
Ridgewood = 6
River Edge = 1
Rutherford = 9
Teaneck = 2
Tenafly = 1

Total = 73

Passaic County & Number of Licensees

Clifton (including Athenia) = 7
Hawthorne = 2
Little Falls = 1
Passaic = 5
Paterson = 14
Pompton Lakes = 1

Total = 30

I could believe Paterson would lead the pack in Passaic County, but Rutherford's 9 hams surprised me. Next came Ridgefield Park with 8, then Ridgewood with 6, Bogota with 5, and Hasbrouck Heights and Lyndhurst were tied with 4. The remainder had 3 or less. There were no hams licensed in Fair Lawn, yet. I'm still searching to find out who that granddaddy of Fair Lawn hams was!

Until next month, Happy Holidays to all, and best wishes for the New Year,

73,

Fred W2AAB

NOTES:

[1] (Anonymous), “Consistent ‘DX Work’ by 2OM,” *Experimenter’s World,* July, 1922, p. 76-77, Online at: https://books.google.com/books?id=_eM_AQAAMAAJ&pg=RA2-PA76&lpg=RA2-PA76&dq=F.B.+Ostman+Ridgewood+NJ&source=bl&ots=NvsXwN0kCv&sig=ACfU3U3nXlC042luCYZdhSVFJ1-N076qcg&hl=en&sa=X&ved=2ahUKEwiR48WE1uflAhWFmOAKHU9ODFEQ6AEwAHoECAUQAg#v=onepage&q=F.B.%20Ostman%20Ridgewood%20NJ&f=false

[2] *Amateur Radio Stations of the United States,* U.S. Department of Commerce, June 30, 1926

[3] “Sherman J. Mallery in the 1940 Census,” at: https://www.ancestry.com/1940-census/usa/New-Jersey/Sherman-J-Mallery_4mc2gp

[3] Op. Cit., Note [2]

[4] “Grantwood, New Jersey,” *Wikipedia,* at: https://en.wikipedia.org/wiki/Grantwood,_New_Jersey

[5] *Amateur Radio Stations of the United States,* U.S. Department of Commerce, June 30, 1924

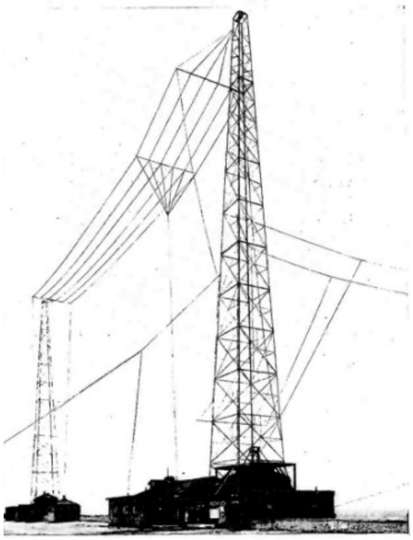
[6] Ibid.

[7] *Amateur Radio Stations of the United States,* U.S. Department of Commerce, June 30, 1923

[8] Op. Cit., Note [5]

[9] (Codella, Chris), “Relaying in the DX Age,” *Ham Radio History: Strays—Traffic, 200, and 20,* at: http://w2pa.net/HRH/strays-traffic-200-and-20/

[10] (Author unknown), “Hallicrafters FPM-200 Transceiver: History of this Radio,” at: http://www.radiolabworks.com/fpm200/history.htm



# FLARC Proof Of Performance

## Why is FLARC New Jersey's most exciting radio club?

### Here are just a few reasons so far in 2019:

- Field Day at Memorial Park
- Winter Field Day
- World Amateur Radio Day special event
- Earth Day At Great Falls special event station
- Garretson House special event station
- Memorial Day parade public event
- Portable Day(s) with BARA
- Fair Lawn Street Fair(s) public event
- Independence Day Fireworks public event
- Vintage Night
- "Kids Day" public event with TCRA
- North American QSO Party
- NJ QSO Party
- Foxhunts
- Summer VANFEST at W2DLT
- Field Trip to iHeart Radio

### Plus:

- Thursday Night open house and CW class
- Soldering classes
- RACES/ARES public service
- Monthly w sessions
- Projects such as end fed and 2m antennas
- Annual member interest survey
- Weekly Monday "Near and Far" Net
- FLARC auction
- FLARC Holiday Party free to members

### Plus:

- Over 45 consecutive months of speaker programs including K1JT in 2019!
- New equipment in the shack!
- New antennas on the roof!
- Coming Soon: Tuesday evening and Saturday morning club openings
- And…a clubhouse!!

## That's why FLARC is the best club around!!
## Join us with more activities, speakers and projects to come!

# ARRL FIELD DAY 2019 RESULTS ARE RELEASED

## Summary : We Had Fun!!

If you thumbed through the December 2019 issue of *QST* you've probably checked the annual roundup of Field Day scores. FLARC was credited with 6,132 points down from 6,810 (-10%) in 2018. All scores were down about seven percent per ARRL. The club moved to category 4A in 2018 from 2A and 2F in previous years.

The database is now also available.

Here are our club's rankings based upon our final total of 6,132 points. FLARC ranked:

- **131st overall (down from 113) out of 3,112 total entries (4th percentile/no change)**
- ***1st in total points category 4A within New Jersey***
- ***1st in Northern New Jersey section in total points in category 4A***
- ***1st in total QSO's in the Northern New Jersey section (up from 2nd)***
- ***1st in overall member participation in New Jersey with 84 and***
- ***1st in member participants in Northern New Jersey with 84!!***
- ***1st in total QSO's in category 4A within Northern New Jersey***
- **2nd in total points in category 4A within the Hudson Division**
- **2nd in total QSO's in category 4A within the Hudson Division**
- **2nd in total QSO's in category 4A within New Jersey (down from 1st)**
- **4th *in total points within the Northern New Jersey section (down from 1st)***
- **7th in New Jersey overall in total points (down from 5th)**
- **10th in total QSO's in the Hudson Division**
- **11th in total points within the Hudson Division (down from 8th)**
- **12th out of 141 in category 4A overall**

A top twenty percentile finish among all categories in a far more competitive category (4A) than our old 2A was a really positive effort, especially with our history of being "casual contesters."

| **Year** | **Score** |
|---|---|
| 2019 | 6,132 |
| 2018 | 6,810 |
| 2017 | 3,022 |
| 2016 | 2,598 |
| 2015 | 2,082 |
| 2014 | 1,150 |
| 2013 | No Submission |

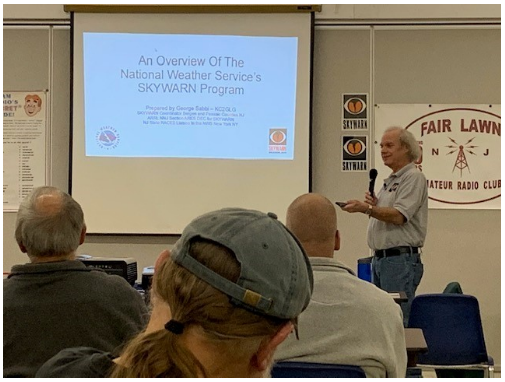
A large measure of congratulations to all of our Field Day participants... only six months to go until FD 2020!

# George Sabbi KC2GLG Talks SKYWARN At The November 15th Speaker Series

Thirty-eight attendees were present at the November 15th speaker program to hear Bergen-Passaic SKYWARN coordinator George Sabbi KC2GLG provide an overview to the most successful program in New Jersey and the evolution of the program going forward. It's safe to say that George generated the highest number of audience questions in memory and his detailed presentation and commentary made the weather and ham radio all the more important. George's handout is also included below.

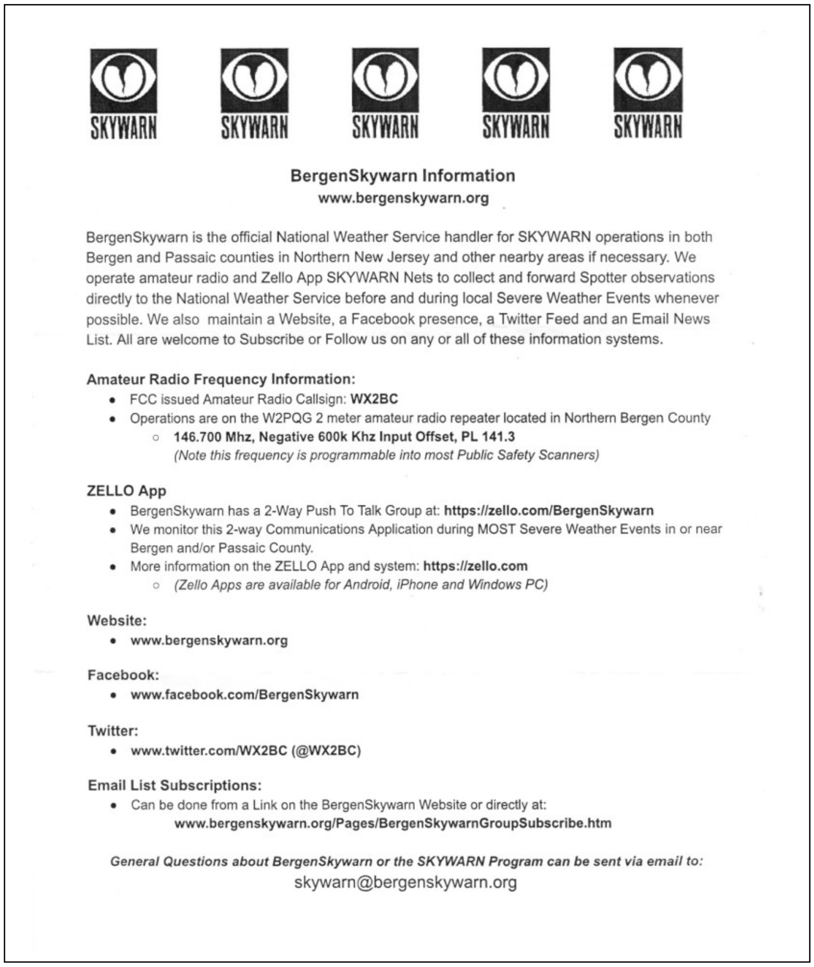
*Tnx Glenn for the pix!!*

The content held the attention of all present



George KC2GLG gets the discussion underway

A thanks on behalf of FLARC for a great show!!



SKYWARN SKYWARN SKYWARN SKYWARN SKYWARN

**BergenSkywarn Information**

**www.bergenskywarn.org**

BergenSkywarn is the official National Weather Service handler for SKYWARN operations in both Bergen and Passaic counties in Northern New Jersey and other nearby areas if necessary. We operate amateur radio and Zello App SKYWARN Nets to collect and forward Spotter observations directly to the National Weather Service before and during local Severe Weather Events whenever possible. We also maintain a Website, a Facebook presence, a Twitter Feed and an Email News List. All are welcome to Subscribe or Follow us on any or all of these information systems.

**Amateur Radio Frequency Information:**

- FCC issued Amateur Radio Callsign: **WX2BC**
- Operations are on the W2PQG 2 meter amateur radio repeater located in Northern Bergen County
  - **146.700 Mhz, Negative 600k Khz Input Offset, PL 141.3**
    *(Note this frequency is programmable into most Public Safety Scanners)*

**ZELLO App**

- BergenSkywarn has a 2-Way Push To Talk Group at: **https://zello.com/BergenSkywarn**
- We monitor this 2-way Communications Application during MOST Severe Weather Events in or near Bergen and/or Passaic County.
- More information on the ZELLO App and system: **https://zello.com**
  - *(Zello Apps are available for Android, iPhone and Windows PC)*

**Website:**

- **www.bergenskywarn.org**

**Facebook:**

- **www.facebook.com/BergenSkywarn**

**Twitter:**

- **www.twitter.com/WX2BC (@WX2BC)**

**Email List Subscriptions:**

- Can be done from a Link on the BergenSkywarn Website or directly at:
  **www.bergenskywarn.org/Pages/BergenSkywarnGroupSubscribe.htm**

***General Questions about BergenSkywarn or the SKYWARN Program can be sent via email to:***

skywarn@bergenskywarn.org

# ARRL Hudson Division Director
# Ria Jairam N2RJ Discusses The Latest From HQ
# As FLARC Closes Out Its 2019 Speaker Series
# On Friday, December 13th

**FLARC is proud to have one of its own to end the fourth consecutive year of monthly programs on December 13th with Ria Jairam N2RJ, the ARRL Hudson Division Director on hand to discuss the latest going's on in Newington at the Fair Lawn Senior Center, 11-05 Gardiner Road in Fair Lawn.**

**The program begins at 7PM and refreshments will be served.**

**A FLARC member, Ria has been licensed since 1997 in her native Trinidad and Tobago and in the US since 2001. First becoming interested in radio at age five from her dad who was an avid SWL, she started in Amateur Radio in secondary school under the mentorship of a teacher, Mr. Tony Lee-Mack, 9Y4AL (SK).**

**Ria is especially interested in Radiosport (contesting) and DXing, as well as homebrewing, kit building, DMR, DSTAR and digital weak signal modes. She has earned several DXCC awards including DXCC on all three modes and nine bands including 160 meters along with DXCC challenge. She has also won several contest plaques including regional, national and North American titles in various DX contests. A keen SDR enthusiast, she has won a "Top Elmer" award in 2016 for her work with VPN remote access for Flex radios. She has also won two FlexRadio "Top Tester" awards for her work in testing and debugging SmartSDR 2.0 and the Power Genius XL solid state amplifier.**

**Ria is a QSL card sorter with the W2 QSL bureau, run by the North Jersey DX Association (NJDXA) and is the Northern NJ section manager for the Frankford Radio Club (FRC). She is also the District 2 chair of the Young Ladies Radio League (YLRL) and a member of the British Young Ladies Amateur Radio Association (BYLARA).**

**Ria is an alumnus of the NYU Tandon School of Engineering, where she studied Electrical Engineering. Look for her in the DX pileups, often operating remotely, or operating WSJT digital modes to snag a new one. She blogs about these activities at her website: n2rj.com**

**Ria Jairam N2RJ**

## Fair Lawn RACES/ARES Corner

Please sign up for various nets and activities taking place at the following email address:

https://arrl.volunteerhub.com/lp/nnj

The FL-ARES KB2FLA Net takes place every Wednesday at 1900 hours on the FLARC Repeater. However, one Net per month is replaced with a video learning session provided by Randy WU2S. This month, we may have a video session on the 3rd Wednesday - December 18th, in place of the FL-ARES Net. Details regarding the video session will be provided in an upcoming email to our membership. Please join us every Wednesday for any updates, messages or activities which may take place. FL-ARES would like to thank the FLARC for the use of its repeater.

Now, getting back to FL-RACES:

Our next FL-RACES KB2FLR net will take place on Wednesday, December 11th at 1920 hours. Please make a note of the time. The Fair Lawn ARC Repeater is used (RX 145.47 MHz / TX 144.87, PL TX Tone 167.9 Hz). Thank you to the Fair Lawn Amateur Radio Club for permitting FL-RACES for using the repeater.

FL-RACES is part of several RACES groups which operate within Bergen County and from time to time has training opportunities with Bergen County RACES.

FL-RACES will be the Net Control Operating Station for the BC-RACES Net on Wednesday, January 22, 2020. We will be meeting / operating from the FLARC facility. Please arrive at 1900 hours in preparation for being the Net Control Operating Station for the BC-RACES Net.

The volunteer efforts of our members are very much appreciated.

Our monthly meetings usually take place right after the FLARC business meeting. Please join us for the next FL-RACES meeting.

If you are interested in joining the Fair Lawn RACES, please contact me. You don't have to be a Fair Lawn resident to be a part of Fair Lawn RACES.

## Fair Lawn RACES/ARES Corner

For information regarding Bergen County RACES, please go to http://www.bcnjraces.org.

Thank you very much. Season's Greetings!! People say hindsight is 20-20. At this point in time we can look forward to 2020.

Have a happy and safe Holiday Season. 73.

***David KD2MOB***

## JUST IN --

On Sunday, Dec. 8, David KD2MOB was invited to make a presentation on Amateur Radio at the Fair Lawn Jewish Center. Randy WU2S, Karl W2KBF and Gene WO2W also attended to provide background and comments.

David invited all to visit the Fair Lawn Amateur Radio club and also demonstrated the W2NPT repeater by using his Baofeng HT to make contact with Stan KC2K and David N2AAM.

## Breaking News ...

Word has been received that W2NPT FLARC won first place for Bergen County in the 2019 NJ QSO Party. We're still awaiting results of the entire contest.

New Jersey QSO Party

Sponsored by
Burlington County Radio Club
K2TD

# Proposed Bylaw Changes To The By-Laws Of The Fair Lawn Amateur Radio Club

## [ all four changes were approved at the Dec. 2019 meeting ]

The FLARC Council has reviewed a set of proposed amendments to the FLARC By-laws. They are presented here in full. Members need to read and discuss them. We will vote on these amendments during our December business meeting and if accepted they will take effect immediately.
The proposed amendments are:

**It is proposed to amend the FLARC Bylaws Section 7.2 Annual Dues**
**Paragraph 5 Associate Members: Eligibility**
**from:**
5. Associate Membership: Eligibility

Applicants for Associate Membership shall be open exclusively to Fair Lawn residents with an interest in the purpose of the organization, bearing proof of residency. Associate Members shall not be entitled to voting rights or any other rights of full membership. No annual dues shall be imposed.

To:
*5. Associate Membership: Eligibility*

*Applicants for Associate Membership shall be open exclusively to Fair Lawn residents with an interest in the purpose of the organization, bearing proof of residency. Associate Members shall not be entitled to voting rights or any other rights of full membership. No annual dues shall be imposed.* ***Associate members may not hold any elected or appointed leadership positions. Associate members may not borrow club equipment or supplies. Associate members may operate club equipment only under the direct supervision of a full member in good standing.***

=========================

**It is proposed to amend the FLARC Bylaws Section 2.4 Nomination of Committees**
**from:**
Section 2.4 Nomination of Committees

In the month of October of each calendar year, the Council shall appoint a nominating committee consisting of two (2) Trustees of the Association. The nominating committee will present its recommendation for the slate of Officers at the November business meeting. After the nominating committee has presented its recommendation, floor nominations will be accepted. Only voting members in good standing will be accepted for nomination.

To:
***Section 2.4 Nominating Committee***

*In the month of* ***September*** *of each calendar year, the Council shall appoint a nominating committee consisting of the two (2) Trustees of the Association whose term is not expiring at the end of the current year. The nominating committee will present its recommendation for the slate of Officers at the* ***October*** *business meeting. After the nominating committee has presented its recommendation, floor nominations will be accepted* ***at this meeting and floor nominations will be accepted at the November business meeting.*** *Only voting members in good standing will be accepted for nomination.*

=========================

**It is proposed to amend the FLARC Bylaws Section 2.5 Management of Association Property**
**from:**
Section 2.5 Management of Association Property

Property of the Association may be acquired, used or disposed of in accordance with the direction of the Council. The Council shall not incur any debt or liability or any combination of debts or liabilities, exceeding 25% of the net assets of the Association without a majority voice vote of members present at any business meeting. No debt or liability, or any combination of debts or liabilities shall be incurred or maintained by the Association that exceeds its assets at any time.

# Proposed Bylaw Changes For The Fair Lawn Amateur Radio Club

*To:*
*Section 2.5 Management of Association Property*

*Property of the Association may be acquired, used or disposed of in accordance with the direction of the Council. The Council shall not incur any debt or liability or any combination of debts or liabilities, exceeding 25% of the net assets of the Association without a majority voice vote of members present at any business meeting. No debt or liability, or any combination of debts or liabilities shall be incurred or maintained by the Association that exceeds its assets at any time.*

**Section 2.5.1 Quartermaster**

**The Council may appoint a club Quartermaster who will oversee asset management.**

**The duties of the Quartermaster are:**

- **Be responsible for club property and keep accurate records of being checked out/in of the club**
- **Shall report missing, damaged, unreturned equipment to the board**
- **Keep maintenance records and schedules on serviceable equipment in club room**
- **Keep maintenance records and schedules for equipment on club's exterior to include antennas, rotators, cables, towers.**

**The term for the Quartermaster shall be two (2) years.**

========================

**It is proposed to amend the FLARC Bylaws Section 4.5 Duties of Treasurer**
**from:**
Section 4.5 Duties of Treasurer

The Treasurer shall keep the books and accounts of the Association and shall perform any other duties usually assigned to a Treasurer. The Treasurer shall give Bond, if required by the Council. The Treasurer shall make payments only for bills properly approved by the Council. The Treasurer shall co-sign with the President or Vice President all checks drawn on the accounts of the Association. The Treasurer may delegate a limited portion of Treasurer duties for a limited time, to another member of the Association in the absence or incapacity of the Treasurer. The limited delegation of duties of Treasurer shall be approved by the Council. The Treasurer shall maintain a database of members in good standing containing the names and addresses of each member of the Association, along with the date and manner of termination of such membership and shall perform all other duties usually appertaining to the Office of Treasurer.

To:
Section 4.5 Duties of Treasurer

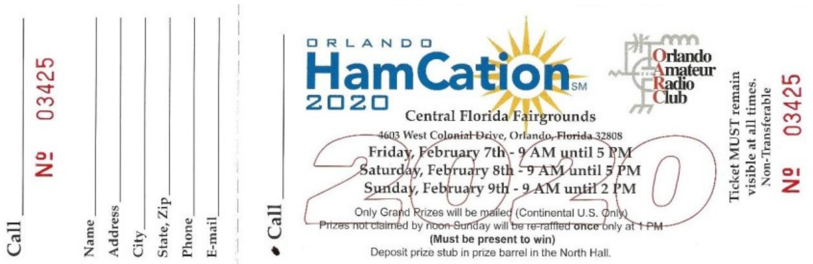
The Treasurer shall keep the books and accounts of the Association and shall perform any other duties usually assigned to a Treasurer. The Treasurer shall give Bond, if required by the Council. The Treasurer shall make payments only for bills properly approved by the Council. The Treasurer shall co-sign with the President or Vice President all checks drawn on the accounts of the Association. ***The Treasurer shall furnish to each of the three Trustees, quarterly at the end of February, May, August and November, a "line item" summary of all transactions during those previous three months. This summary shall be provided prior to the business meeting of the following month (March, June, September and December).*** The Treasurer may delegate a limited portion of Treasurer duties for a limited time, to another member of the Association in the absence or incapacity of the Treasurer. The limited delegation of duties of Treasurer shall be approved by the Council. The Treasurer shall maintain a database of members in good standing containing the names and addresses of each member of the Association, along with the date and manner of termination of such membership and shall perform all other duties usually appertaining to the Office of Treasurer.

========================

## Going To Hamcation?

Need to get some sun come February?  Then let's go to Hamcation!

The annual event is held in Orlando and the dates for this year are February 7-9th.  Tony N2SIQ is looking to put together a bunch of members who want to head down together.  Touch base with him and he'll be the Wagonmaster. You know there will be snow at FLARC, yes!!??



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ORLANDO

HamCation℠

2020

Orlando Amateur Radio Club

Central Florida Fairgrounds

4603 West Colonial Drive, Orlando, Florida 32808

Friday, February 7th - 9 AM until 5 PM

Saturday, February 8th - 9 AM until 5 PM

Sunday, February 9th - 9 AM until 2 PM

Only Grand Prizes will be mailed (Continental U.S. Only)

Prizes not claimed by noon Sunday will be re-raffled **once** only at 1 PM

**(Must be present to win)**

Deposit prize stub in prize barrel in the North Hall.

Ticket MUST remain visible at all times.

Non-Transferable

№ 03425

**Actual ticket – someone is going!!**

## Winter Field Day Is January 25-26th

Neither freezing rain nor snow nor whatever will keep FLARC from participating again in Winter Field Day at Memorial  Park.

We've been lucky weather-wise and we trust that there will be some operators intrepid enough to fend off the cold overnight in the tent and trailer and get us some bonus points for operating outdoors and above the Mason-Dixon line.

Check with the club officers about the details and find out more at the January business meeting.

**Winter Field Day 2019 – No snow!!**

## Dues Are Due

**It's that time of the year again as dues for 2020 are now being received by our Treasurer,  Al WA2OWL.**

**It's always good to get your dues in early and save us the task of chasing you down after New Year's.  And they remain at the same level as they have for many years while the club has grown in size and activities.**

**This year we renewed over 85% of our 2018 members; quite a feat with a base membership number of around 145.**

**The FLARC member count is now at/around 160.**

**Thanks to you, this is the best club around and you vote your satisfaction with the club by getting your dues in and done for. Al can explain other dues levels beyond basic renewal.**

**Dues are the lifeblood of the club. An ad earlier in the newsletter points out what's been done this year to earn your renewal.**

**So renew now while you're thinking about it and give FLARC a great start into 2020!!**

## Ed-itorial: Where Did 2019 Go?

As you've probably noted in the latest club promotional flyer and in this newsletter, 2019 was a *very* good year for the club. New transceivers, revamped antennas, three special event activities, monthly speakers and extended opening hours are just the top items in our "proof of performance" list to align what members want (from the member survey) and what got done in past year. The result is now a record member count and an increase of about ten percent in head-count over 2018.

The "Pop Up Tuesday" openings (not every Tuesday, until mid-February — thus the "pop-up") is the final piece of the current FLARC opening schedule. The club is listening to its members.

Hopefully there are more good things to come in 2020. The member survey goes out on December 1st and you can again provide the Council with valuable information and direction.

One area that may be hard to measure is participation - or the buzz word of "engagement." As the club has grown, overall participation has been slow to catch up. Field Day participation this year was a good example. Many members say "it's the same people who participate all the time." That's probably true for most clubs. And FLARC now does have a "long tail" of less than active membership due to work and family requirements (the club is getting younger, which would reinforce this). Pareto is alive and well.

Perhaps a 2020 goal is to help change that. What do we need to do to increase member interest and participation? What do you think?

What else do we need and want to do in the coming year? The member survey is a good communication vehicle as is button-holing the new officers. It's your club. It's our club. Let's make it happen.

2019 was a successful year for FLARC.
2020 promises to be the same.

Happy holidays.

de Ed WX2R

## Farewell To Volume 4

**Thus we close the final issue of the 2019 Resonator series. My thanks to all who have contributed on a monthly basis -- W2AAB, W2ABE, WU2S, KM2C, KD2KLN and N4GG and contributors who have provided timely copy such as W2KBF, KD2MOB and KD2BMX. Thanks to N2PRT and W3EH and others for many, many pix. And a thanks to all our monthly profiled members who have made deadline and contributed much to the life of this club. Who have I forgotten??**

**Again, a special thanks to my poof-reader (sp). Jim W2JC who stays picky and keeps me honest and grammatically correct, and formats the "look and feel" of every issue. He reads a lot of copy... a lot! Any errors that remain are mine and mine alone. We have come a long way in 48 issues... pushing almost 500 pages of club-generated content. Looking back at the old FLARC newsletter *QUA* (below) shows me at least how far this club has come. Thanks to all of you it's easy.**

**Best wishes for the New Year. Thanks for reading each issue!**

**de Ed WX2R**

## *The Resonator* Goes On A Mini-Holiday

As part of the rites of the ageing process, your editor is headed off to FL with the XYL for about six weeks in the sun – returning around Valentine's Day to shovel snow and make the trip an instant distant memory.

As a result, *The Resonator* may look a little smaller (mercifully) but will still publish on schedule (we trust). January and February will be affected and then back to normal with the March issue.

## *QUA – The Resonator's* Predecessor

A holiday tradition, each year we go back into the archives and reproduce an old issue of a FLARC newsletter to recall old calls and see how the ham world has changed (or not).

On the following two pages, we go back to June 1990. BTW, we never did document the club history as far as the editor recalls.

-ed

**1990 Club Officers**
President - Lee Bowgren, WK2T
Vice President - Ed Sabo, NV2M
Secretary - Mike Zadoroznyj, KB2HMK
Treasurer - Art Rippas, KB2DOQ
Trustee - Harvey Hoffman, WA1YCP
Trustee - Bryan Hines, WG2D
Trustee - Tony Walker, KA2TAM
----
Newsletter - Frank Terranella, N2IGO

# QUA

Fair Lawn
Amateur
Radio Club

Newsletter - June, 1990

## Club News

The May Business Meeting of the Fair Lawn Amateur Radio Club was called to order on May 4, 1990 at 8:10pm DST by Club President Lee, WK2T. Following are highlights of the meeting:

- Congratulations to Ed Efchak, formerly KB2IKI for getting his new extra class call WX2R.
- Memorial Day Parade - Volunteers will rendevous at 8:30 a.m., May 28, 1990 at the club.
- Power Supply for the Kenwood TR751 2m Transceiver was donated by new member Dave, KE2KY. Ben, KB2EJY, donated the 2m Ringo Ranger. It was decided to use the rear radio room as the operating position for the 2m rig.
- Linear amplifier was sold to Frank, N2IDE.

- Tony, KA2TAM, asked to put up the late Frank Leonard's plaques in the front radio room. This would serve a memorial to Frank, W2NPT. The club responded with resounding approval.
- Tony, KA2TAM, requested that a history of the FLARC be written with the assistance of original members Myer, KA2CHY and Jerry, WA2QZF. Ed, WX2R, volunteered to document these memoirs.

- Field Day planning was begun. Volunteers are beginning to sign up. A letter of permission will be required from the city of Fair Lawn for the Field Day setup. Lee, WK2T said he would take care of it. Further planning will be discussed at the June business meeting.

- Tony, KA2TAM, asked to move the FLARC weekly Tuesday net to start at 8:30pm on 28.350 +/- 5khz. The new hours would take effect the first week of June. After the SSB net if there are any interested parties on frequency, a CW practice net would be initiated. The CW portion of the net would be conducted on 28.250 +/- 5khz. Also a 2m simplex frequency has been adopted by the FLARC. The frequency agreed upon was 144.450.

- Ed, WX2R, stated that our public relations exhibit at the Fair Lawn Library will be on display from August 1 to August 31. The exhibit will occupy the 4 front display panels at the library entrance. Topics for the exhibit will include a history of amateur radio, various aspects of the hobby, as well as a description of the FLARC. Ed will draft up a list of the necessary items needed to complete the display.

**Next Business meeting**
**June 1, 1990**

## Ham Radio News

### 9600-BAUD TRAFFIC SENT VIA UO-14

On April 4, the first 9600 baud message was digipeated through OSCAR-14 between James Miller, G3RUH, and Jeff Ward, G0/K8KA. This is believed to be the fastest data transmission through an amateur satellite to date.

UoSAT-D is on 9600-baud for about 1.5 minutes every 5 minutes. The FM signal at this data rate sounds like an unsquelched background hiss. Both amateurs used the Yaesu FT736R to make this high speed contact, however, many other amateur transceivers can be modified for use at 9600 baud: A comprehensive article about the G3RUH 9600-baud modem design is published in the ARRL 7th Computer Networking Conference Papers and is available from ARRL HQ.

### TORNADO DESTROYS W5UN'S ARRAY

On April 4 AMSAT-NA officials reported that Dave Blaschke's (W5UN) well known Earth-Moon-Earth (EME) moonbounce array was destroyed by a tornado touching down at his QTH located near Houston, TX. An article in the January issue of QST spotlighting Dave's EME system and the enormous effort he put into building the world's largest privately owned 2-meter EME array.

Shortly before the devastation, W5UN assisted AMSAT when it needed all of the 32.5 dBi gain generating about 2 megawatts EIRP from his moonbounce station to reset the on-board computer (OBC) of DOVE-OSCAR-17 (DO-17). The signal from W5UN's EME station was able to silence DOVE's 2-meter transmitter and, after several tries, was able to send the reset command allowing Bob McGwier, N4HY, and Harold Price, NK6K, to regain control of DOVE and it's battery maintenance system.

### SOUTHERN CALIFORNIA ADOPTS NEW 6-METER BAND PLAN

At a meeting in Anaheim, CA, on March 31, 1990, sponsored by the Southern California Repeater and Remote Base Association (SCRRBA), representatives of all southern California 6-meter band users' groups adopted a new 50-54 MHz band utilization plan.

The new plan is a modular approach dividing the 51-54 MHz repeater spectrum into three 1-MHz blocks. Within each block the repeater input/output spacing will be 500 kHz, with inputs in the lower 500 kHz, and outputs in the higher 500 kHz. Simplex and other special-use channels have been provided in each block. The primary FM simplex channel remains at 52.525 MHz.

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**Fair Lawn Amateur Radio Club**
**12-56 River Road**
**Fair Lawn, N.J. 07410**

**de Hal Kennedy N4GG**

# Balun Bits

I was asked the other day if I could do a piece on baluns. I have come to regret saying yes. I regret it because the subject is just-too-darned-big.

A lot has been written about baluns. The ARRL Antenna Book and the ARRL Handbook both explain balun theory and types. Myriad web-based articles do as well. With the web-based articles: Caveat Emptor. An excellent source of information is Tom Rauch, **W8JI**'s web page: www.w8ji.com. Balun information could fill a book – and it has. Jerry Sevick, W2FMI, has written two books on the subject – available on Amazon. They are excellent.

Rather than repeat what's in the handbooks and on the web, I thought I would offer a few hints, kinks and examples of where we might use a balun, and why. Baluns are valuable and necessary in many applications. Let's take a look.

First some definitions:

The word "balun" is simply the portmanteau of balanced and unbalanced. Yes, that's $3 English. I had to look it up. Portmanteau just means sticking two words together. Like smog. Smog is smoke and fog stuck together. Words like portmanteau don't belong in articles like this – but I can't find another word for "stuck together."

Balun: A balun is a non-directional device that transfers RF between a balanced transmission line and an unbalanced transmission line, such that current flows equally on both wires of the balanced line and does not flow on the outside of the shield of the unbalanced transmission line.

Baluns have two cousins:

Unun: A device used to prevent or "choke" RF current from flowing on the outside of a shielded cable (unbalanced transmission line), e.g., coax. Ununs are coax in, coax out, or, if you prefer, an unbalanced transmission line in and an unbalanced transmission line out.

Balbal: I just made that up. I have never heard the term "balbal" used to describe a device for connecting one balanced transmission line to another. The reason, I think, is because there is not much use for such a device. At N4GG I have connected 300 ohm balanced line directly to 450 ohm balanced line without a second thought. The current in the wires stays balanced when you do that, and the resulting impedance bump doesn't create enough SWR to matter from a loss standpoint. Balanced lines have very low loss, even with significant SWR.

Regarding "balbals" however, see Figure 1. Figure 1 is a reproduction of Figure 23.25 in the 21st edition of the ARRL Antenna Book. I left the ARRL figure number in the caption to credit the source. [As an aside – You do own a copy of the ARRL Antenna Book – yes?] Each of the two diagrams within the figure would qualify as a "balbal." Balanced in, balanced out. Sometimes we need to route balanced lines in places we'd rather not. One example is through an exterior wall on the way to an antenna tuner in the shack. Another is in close proximity to metal objects. The "balance" (equal current in each wire, 180 degrees out of phase) in a balanced line is lost when the line is close to a metal object or close to the ground. You can't tape ladder line (sometimes called window line) to a boom or to a mast. You can't run balanced line along a gutter or down a downspout. You *can* use either of the two "balbal" techniques in Figure 1 to address these needs. You can even use the techniques in the figure to create a balanced transmission line that runs all the way from the antenna to the shack – using coax. Done this way, the proximity of the "balanced transmission line" to metal or to the ground doesn't matter, and the line will not pick up unwanted noise.

## Around the Shack

A question I get now and then is how close is too close – when we are considering balanced lines near the ground or metal objects. My personal rule-of-thumb is two feet, but I can't defend that number. It is helpful to twist balanced lines. Hanging from an antenna, twisting adds stiffness and keeps the line from whipping around in the wind. Near the ground or near metal, twisting tends to "even out" the proximity effect. "Even out" is in quotes. How much does it help? I don't know. One half-twist every few feet is plenty and no, I have no science to defend that number.

What must be the most asked antenna question of all time is: "I'm putting up a dipole and I'm going to feed it with coax. Do I need a balun?" I guess the question keeps getting asked because the answer is "maybe."

A dipole is a balanced antenna. A balun at the feedpoint will accomplish the transition from a balanced antenna to an unbalanced transmission line. The balun prevents RF current from flowing down the outside of the coax and radiating. Some antennas like the G5RV use transmission line radiation to form part of the antenna – but those are exception cases. Radiation from the transmission line causes pattern distortion and power lost to the antenna itself. Including the shield of the coax as a radiating part of the antenna also allows it to pick up additional noise on receive. Dipoles are typically horizontal and dipole transmission lines are typically vertical. Do we want our dipole coupled into both the horizontally and vertically polarized noise sources in our house or yard?

Dipoles suspended only at the ends will sag a lot when the weight of a balun is added at the feedpoint, and baluns cost money, so many dipoles are directly fed with coax and they work. The "do I need a balun" question is really a question of how good is good enough. If you want to rag chew with your pals, you can get by without the balun. If you want to work DX, the lower noise and better pattern a balun yields make the balun a near necessity. The optimum way to feed a dipole is with a balanced line (open wire or ladder line) to a balun at the ground, then using coax to get from the balun to the shack. SWR becomes important in that approach – high SWR on the coax produces a lot of loss. A good way to minimize SWR on the coax is to make the balanced line from the antenna an exact half wavelength (or multiple of a half wavelength), which presents the antenna's impedance to the coax, independent of the impedance of the balanced line. An example will help. The 75 ohm impedance at the feedpoint of a dipole will also be 75 ohms at the end of a half wave of balanced transmission line. The transmission line can be 300 ohm Twinlead, 450 or 600 ohm open wire line – it doesn't matter. At the far end of one half wavelength (or multiple) of balanced line, we will see 75 ohms. At that point a 1:1 balun will allow using 75 ohm coax back to the shack for an SWR of 1:1 or 50 ohm coax and accepting a 1.4:1 SWR (the usual approach).

Balanced lines are excellent for long runs – let's take a look at a LONG run - 1,000 feet. We have the option to use coax all the way, hard line or a balanced line with a balun on each end. Here are the losses on 80, 10 and 6 meters:

| | Loss of 1,000 Ft (dB) | | |
|---|---|---|---|
| | MHz | | |
| | 3.5 | 28 | 50.1 |
| RG8/X (Belden 9258): | -5.6 | -18.5 | -25.9 |
| RG-213: | -3.6 | -11.4 | -15.7 |
| Andrew ½" Heliax | -1.0 | -3.2 | -4.5 |
| 450 ohm ladder line: | -0.45 | -1.5 | -2.0 |
| 600 ohm open wire line: | -0.32 | -1.0 | -1.4 |

The table neglects balun losses on the ends of the balanced lines due to the high degree of variability among balun types and manufacturers. 450 ohm line has approximately half the loss of ½" Heliax, at a fraction of the cost and weight. Nothing beats open wire line.

To get a full appreciation of just how good open wire line is vs. coax, let's take a closer look at the loss in 1,000 feet of RG/8X at 50.1 MHz. Per the table above the loss is -25.9 dB at an SWR of 1:1. But, how much is -25.9 dB in a context we can appreciate? How's this: 100 watts delivered into 1,000 feet of RG8/X at 50.1 MHz yields 0.3 watts at the antenna. We have lost 99.7 % of our signal. This happens on receive as well as transmit too. You won't hear much and not many will hear you. If we lost 99.7 % or 99.3 watts of our transmit power, where did it go? Into heat. The coax gets warm. At 1,500 watts transmit power RG8/X gets noticeably warm to the touch.

One more observation from the above example: When the loss of a transmission line gets very high, and 25.9 dB is VERY high, SWR at the transmitter always appears to be 1:1, independent of what it is at the antenna. I have mentioned this in many talks I've given – **the worse the loss in a transmission line the better your SWR looks at the shack.**

Most of us don't need a 1,000 foot transmission line, but the table is instructive nonetheless. At N4GG I try to keep loss from the rig to the antenna at -1 dB or better. The table makes the case for balanced lines where possible. An application often unnoticed is the use of balanced lines at VHF.

Baluns have been around a long time. When I was first licensed in 1961, Hy-Gain was offering their BN-86 balun, for mounting at the dipole feedpoint of their Yagi antennas. More than 60 years after its introduction, the BN-86 is still available. It's a 1:1 voltage balun and the design has been eclipsed by current baluns – but a BN-86 does what a balun is supposed to do. It matches an unbalanced coax transmission line to the Yagi's dipole driven element, preventing current from flowing on the outside of the shield of the coax. This is required for nearly any Yagi design, since the transmission line will wind up taped or clamped to the boom and the mast.

Voltage baluns like the BN-86 are susceptible to breakdown, particularly at high SWR. Anyone who has sent a KW on 40 meters down the line to a HY-GAIN 20 meter Yagi can attest that a trip up the tower to replace the balun may follow. Current baluns ("beads on a string") are forgiving of such lapses and have lower loss.

The last point I'd like to note is that baluns using ferrite (both voltage and current baluns) will cover a fairly wide range of frequencies, but the mix of the ferrite (or the manufacturers specifications) need to be considered. Most "HF" baluns will cover 3.5 to 28 MHz, but many of those do not work well on 160 meters. Baluns covering 160 meters may not work well at 28 MHz. It is perfectly reasonable to put two current baluns in series to cover a very wide frequency range. The Wireman is one of several companies that sell the ferrite beads and small high-power-capable coax needed to home-brew your own balun or unun. By using ferrite beads of two different mixes, a very wide-band balun can be constructed.

Where can we get a balun? Roll your own is my answer for the easy ones, but when we get up to high power and/or large impedance transformations, "store bought" is the way to go. DX Engineering sells great baluns. A less expensive and seemingly little known supplier is CWS Bytemark. I use a lot of 6:1 baluns to transition from 300 ohm transmission line to 50 ohm coax. A 6:1 balun requires three ferrite cores and some complex windings. The cores must be large to handle 1,500 watts. I'm a DIY guy but at some point it's time to defer to a manufacturer. CWS Bytemark's 6:1 balun is under $100, weather tight and handles full power with ease. At N4GG there are a lot of CWS Bytemark baluns in use and I have never had a failure.

## Around The Shack

Notes:

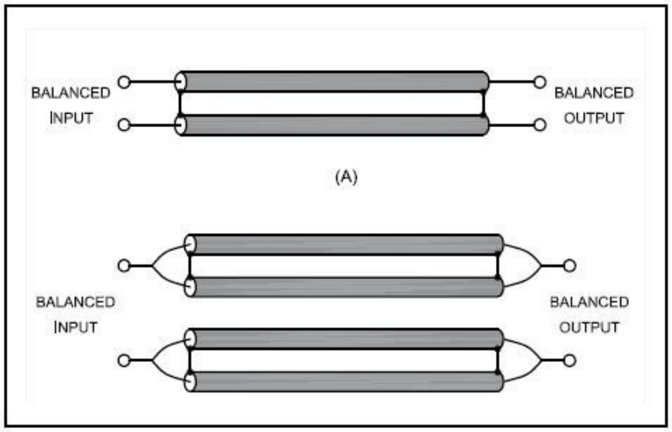

**Figure 23.25 — Shielded balanced transmission lines utilizing standard small-size coaxial cable, such as RG-58 or RG-59. These balanced lines may be routed inside metal conduit or near large metal objects without adverse effects.**

73,
de Hal N4GG

## Florencia Pierri KD2PHZ Inaugurates FLARC 2020 Speaker Series With "The Hams Can: Amateur Operators and the Birth of Household Radio" On January 17th At The Fair Lawn Senior Center

In the early '20s, radio was the realm of amateur build-it-yourselfers, but by the end of that decade, radios had become a standard household commodity. This radical shift came about thanks to a fated boxing match, a massive publicity campaign and, crucially, an organized network of amateur radio operators excited to bring their craft to the wider public. This talk will trace the story of the attempt to broadcast the 1921 boxing match between Jack Dempsey and Georges Carpentier, and the crucial role that hams played in what would become the world's first mass public broadcast.

Florencia Pierri KD2PHZ is a historian of science and technology, and the curator of The Sarnoff Collection at The College of New Jersey.

**Florencia KD2PHZ displays historical radios
at the Sarnoff Colllection**

# Gramps and the Magic Box

## A Christmas Story

### By:  The Old Timer

"What're all those strange noises from upstairs?" asked Tommy Jones, best friend of Stanford Winters, whom everybody called "Stenny."

"Oh, that.  That's gramps fooling with his ham radio again.  He's weird, gramps."

"You mean like CB?"

"Yeah, like that.  But if anybody ever calls it CB, gramps gets real mad.  I don't get it.  Who does radio stuff anymore?  Anyway, he's real old.  Probably ninety years old by now, I guess."

"Your mom said he's only seventy five."

"I don't know.  Anything older than forty is real old to me," said Stenny.

The boys were speaking about Stanford J. Winters, Stenny's grandfather.  He was a retired engineer, and one of the developers of sophisticated communications equipment for the government.  Before retiring, he had worked for a large company that used to be in Clifton before they shut down the plant and moved to South Carolina.  Today, they have factories in Mexico and China.  When the plant shut down, Stanford didn't want to relocate, so he moved in with Stenny and his mother, Joan, as a sort of surrogate dad to take the place of Stenny's father, who had died three years earlier.

"I wondered what that kooky looking TV antenna was on the roof," Tommy said.

"That's for gramps' radio stuff.  He says he talks all over the world with it. I can do that too, on my cellphone."

"He talks in foreign languages?"

"He doesn't really *talk,* Tommy, he uses a telegraph key type thing that sends out Morris code."

"Oh.  Hey, Stenny, we gotta get going if we want to make basketball practice."

"Yeah, okay, I'm ready," Stenny answered, and the boys piled into Tommy's car and sped away.

Gramps, whose wife had died ten years earlier, never remarried.  Once he became a widower, his whole life had been his job, and when that ended abruptly, he rekindled his boyhood interest in amateur radio.  Now, that had become much of his life, and it provided him with many hours of enjoyment.  But not everyone understood this passion.

Some of the neighbors weren't quite sure what to make of gramps.  He was friendly enough when people met him on one of his walks, but they wondered about that strange looking antenna, and those "secret messages" he was sending all over the world.  One young housewife even suggested calling Homeland Security to have him checked out.  Fortunately, another neighbor quashed that idea, concluding that gramps was just a harmless crank.

## Gramps and the Magic Box

Stenny's mom Joan was worried about gramps, too. She thought he might be suffering from depression, because he seldom emerged from his upstairs room except for meals and his walks. At night, sometimes, she could hear him pacing up and down, followed by long periods of silence.

That night, she had a long talk with Stenny about gramps. She thought it would be helpful if Stenny took an interest in gramps and his welfare. Maybe, she thought, ask about his ham radio hobby, since that seemed to be the only thing that gave him any pleasure in life. Stenny reluctantly agreed.

The next day, Stenny climbed the stairs to gramps' room, wondering what he could say to the old man. Stenny was a digital kid. He had a computer when he was ten years old, and a cellphone by the time he was twelve. He thought radio stuff was silly nowadays. But, being a basically good-hearted kid, he kept his promise, and knocked on gramps' door.

"Come on in," gramps responded, and Stenny entered the old man's room.

Gramps was seated before a small desk, on top of which was an old, inexpensive transceiver that dated from the 1980s. Some of the original knobs had been replaced with others that did not match. The transceiver had an analog meter on it, but the bulb to backlight it had blown out years before, and a blue fluorescent type LED display. There was no microphone, only a small keyer and a paddle. To the left was a logbook, and on top of the transceiver, a clock that showed only 24 hour time. Stenny was puzzled by the clock.

"Hey, gramps, that clock must be wrong. It says 23:35. That's eleven thirty five, but it's only 6:35 PM."

"That's because it's not set up for local time, but UTC—Universal Coordinated Time. That's what we use when we communicate by radio. UTC is five hours later than local time at this time of year, and four hours later during summer. We use UTC so that everybody, anywhere in the world can relate to the same time standard."

"But how do you know what time it is *here?"*

Gramps smiled. "You get so you know, after awhile. So what can I do for you, Stenny? How are you doing? How's mom?"

"Oh, I'm okay. Mom's okay, too. I was just wondering about this ham radio stuff. What you talk about, and stuff like that."

"Well, I hardly know where to begin. I start out by sending out a general call to anyone, anywhere. It's just the letters, "CQ." It tells anyone listening that I'm looking to reach someone, anyone, anywhere in the world. Then, I identify myself — not by name, but by my call letters. That tells anyone listening what country I'm in, and in most cases, approximately where I'm located in the United States, and, if they look up my call letters in one of several directories, exactly who I am and my address."

"What do you mean by *call letters?*"

"They're the way to identify my station, and me, personally. They're assigned by the FCC. We have to pass a written test before we can be licensed, you know."

"What kind of test?"

## Gramps and the Magic Box

“Well, they ask questions about technical things — you know, radio electronics, and also the FCC rules and regulations, things like that.”

“Is it hard to pass that test?”

“No, not really, but you do have to study awhile to learn it. They require it because they want people who transmit to know what they’re doing, and not just be button-pushers.”

“You always get mad when I call this stuff CB. Why?”

“Because CB doesn’t require any license, and you don’t have to know anything at all about radio. You just squeeze a microphone button and talk. Any idiot can do that. We hams have to *know* something. Besides, CB is only on one band, and they can legally use only five watts. Hams have many frequency bands, and we can run up to 1500 watts.”

Stenny nodded. “I never knew that. It makes sense, though.”

“There are many aspects to ham radio. Some people like to build their own equipment. I did that for years, but when I could afford it, and I became a bit lazy, I just bought my equipment. Some people like to work “DX,” which means talking to people in other countries. I enjoy that, too, but I’ll talk to anyone. There are lots of other things to do. Contesting, for instance, where you try and contact as many stations in as many different places as you can over a weekend. There are VHF repeaters, where all you need is a small hand-held transceiver, only a little bigger than your cell phone to talk to people. And now, there are digital modes, and satellites, and even bouncing signals off the moon. There’s more than this, too, but that’s some of it.”

“Gee, I had no idea. That’s pretty cool. But how come you only use that telegraph key? How come you don’t talk with a microphone?”

“I have a mike, but I hardly ever use it. I prefer the code. It’s something we all had to learn years ago, and it’s no longer required, but many of us still enjoy it. There’s something special about being able to communicate that way, like learning a new language, or actually, a language-within-a-language. It’s a lot of fun, once you get the hang of it.”

“But it’s so *old,* gramps.”

“Yes, it’s been around a long time, but that doesn’t make it inferior. A lot of old things are beautiful in themselves, you know. Take sailing ships, or steam locomotives, or classic cars. Many people love the old ways, maybe because today everybody is in such a hurry, and things have become so impersonal. Do you know what I mean?”

“Yeah, I guess so. I do like those old cars and things. They’re really cool looking.”

“And the code is like that. It’s something that is simple, yet very effective. With only a few watts and a homemade transmitter, I’ve talked to other hams around the world. You don’t have to buy a computer and add gadgets to it just to talk to somebody. Sometimes, I can tell who I’m listening to just by the way they send the code. That’s called a ‘fist.’ Everybody’s is a little different, except when we use an electronic keyer, which is what that little box on top of my rig is. The code is part of our history, our traditions from the earliest days, and yet it’s still popular. It’s hard to explain, really. It’s like music to my ears, and I could listen to it for hours. And you never know who might be out there, especially on these cold winter nights. I’ve talked to people in Africa and Australia, some living off the grid, with nothing but a radio and a generator to keep them in touch with the world. I’ve talked to servicemen in Antarctica, and delivered messages to their families back home….”
“On the radio?”

"Yes.  In fact, what we call Public Service operating is a very important part of what we do.  When disasters strike, hams are right there to provide emergency communications to help people and the authorities when power lines go down.  That's one of the reasons why this hobby has lasted as long as it has.  More than one hundred years, now.  The government knows we can be of help in emergencies, and we're expected to do our part.  Oh, yes, it's fair to say we've even saved some lives by contacting the authorities when someone's in trouble and needs help."

"Wow.  That's stuff I didn't know.  I could think of a million questions, gramps, now that I know more about it."

"Well, you ask away, anytime."

"But what do you talk about?   I mean, the people you talk to are probably all strangers. "

"Many are strangers, but I've made a lot of friends on the air, too.  A lot of my old friends have passed away, though.  But to answer your question, we start out by giving our first name and location, and tell the other guy how well we're receiving them.  Then we tell them what equipment we're using, and sometimes, the local weather.  Then, sooner or later, we start talking about other things…."

"Like what?"

"Oh, it could be almost anything.  Sometimes we congratulate a new ham on getting his license, or upgrading to a higher class of license.  We tell others how strong their signal is, or how well their sending out their code, and such.  We talk about technical subjects, like how we improved our antenna, and so on. Sometimes, we reminisce about years gone by, and how things have changed, and about the new modes we can operate if we wish to.  Sometimes, we talk about deeper things, like ideas we might have about one thing or another.  But we try and stay clear of religion and politics.  We don't want to offend anybody or get into an argument.  That's not what we're here for."

"What was the most interesting radio contact you ever had?"

"Gee, there have been a number of them, but one stands out.  I was chatting with a guy in Argentina some years back.  It was a nice conversation, about all sorts of things, but the thing that was most interesting about it was that he turned out to be the President of the country.  You never know who's behind those call letters.  You could be talking to an auto mechanic, a teacher, a college professor, a scientist, a novelist, artist, baseball player, radio personality, doctor, lawyer, nun, dentist, even a king.  That's what makes it so fascinating, at least, to me."

"Well, I can talk around the world on my cellphone…."

"Yes, but only if you know the person beforehand, or if you know their phone number, and if they'll talk to you.  With radio, it's very different.  You send out a signal into the ionosphere, and you don't know who might answer, or where they might be.  You strike up a conversation, and find out.  It's kind of like fishing.  You cast your line, and wait for something to get hooked.  You might pull in a 40 pound marlin or a guppy.  It's the element of surprise, and that's what makes it fun."

"I never thought about it that way."

"Well, that's what it's all about: the surprise, the mystery of where you're being heard, and by whom.  Sometimes, I'll tune around one of the bands and hear nothing but stations a few hundred miles away.  Then, all of a sudden, there's a weak signal coming from Japan or New Zealand.  I listen, get the call letters, and contact him.  It's full of surprises, this ham radio hobby.  I think it's the greatest hobby of them all."

## Gramps and the Magic Box

Stenny looked very thoughtful, now.

“Gramps, I gotta admit, that really is kinda cool.”

“Yes, it is.  It’s held my interest since I was fourteen years old, and I’m still discovering new things about it.  Just the other day, I read an article online and learned about a new kind of transceiver that can display all the stations active on a band.  It’s on one of those new digital transceivers.  You don’t even have to tune around, just look for a blip on the screen, and you know there’s someone sending there.  My old stuff can’t do that.  In fact, I’d like to get some new equipment one of these days, if I can afford it.”

“How do they do that?” Stenny asked.

“Well, the idea is old, but the technology is new.  It’s called a “panadaptor,” originally designed in the 1940s, using vacuum tubes and a CRT.  But now, they do it digitally, and much more efficiently. “

“How much does something like that cost?”

“Oh, it’s pretty expensive.  A couple of thousand dollars, or more if you want something real fancy.  But I don’t really need that.  I still like to tune the bands and cast my line in the stream, so to speak.”

“Then, what would you really want, if you could have it?”

“The best thing I could want, or do in this life, is to encourage some youngster to get their license and join the fun that ham radio is.  After all, us old guys won’t be around much longer, and I think this great hobby ought to survive. If only more kids could learn how diversified and interesting it can be.  Yes, that would be enough to make me happy.”

“Gramps, it’s almost time for me to go to bed, and I better get ready.  Thanks a lot for explaining about this ham radio stuff.  I can see now why you love it so much.”

“That’s okay, Stenny.  Come on up anytime.  Tomorrow, I can show you what the ham bands sound like, and let you listen to some people using voice.  Maybe we’ll find a faraway DX station you can listen to.  Okay?”

“Yeah, I’d like that.  Well, goodnight, gramps.  I’ll see you tomorrow after dinner.”

Stenny ran downstairs and got ready for bed.  Later, just before he fell asleep, an idea formed in his mind.  Yes, he thought, that’s what I’ll do!

The next day, and true to his word, Stenny again climbed the stairs to gramps’ room.  The old man was tuning the 20 meter phone band when his grandson entered the open door.

“Oh, hi, Stenny.  I’m just tuning 20 meters.  That’s a good band for “DX,” in other words, foreign stations.  Have a seat here, next to me.”

This time, gramps plugged in an old microphone, one he hadn’t used in years.  He did this for Stenny’s benefit, to show him another aspect of ham radio, one he could easily relate to.

Stenny pulled up a chair and joined gramps in front of the rig.  Gramps tuned in a signal, moderately strong, with what sounded like a British accent.  No, it was a station in South Africa.

"Really?" Stenny asked, "South Africa?"

"Yes. His call begins with "ZS," that's the prefix for that country. Let's see if we can raise him."

The station finished calling CQ, and gramps called, just giving his call once with phonetics. The South African came back. After the usual preliminaries, gramps announced that he had a youngster in the shack, and he'd like to put him behind the microphone.

"Hey, wait, gramps—um, I don't know. What do I say?"

"You don't have any trouble talking on your cellphone, do you? Just give him your name, tell him how old you are, and tell him how well you're hearing him."

When it was time to transmit again, Stenny did as gramps suggested. The South African said hello to Stenny and told him he sounded good on the radio. The man was a contractor for a British company repairing communications equipment, which he described in detail.

Stenny was excited to make his first radio contact, and said he'd like to do this again. The man in South Africa said 73 to them, and said he'd have to shut down for the night and get to bed. He had a big day tomorrow, repairing equipment on a cell tower in a remote district. Gramps and Stenny said 73 back to him, and signed off. The room became silent again, except for the hiss from gramps' receiver.

"Wow — that really *was* cool," Stenny said.

"Did you really enjoy that?"

"Yes, I did. I always thought this stuff was silly and old fashioned, but I know now why you like it, too."

A smile came to the old man's face. "That's great, Stenny. You can come up here and play radio anytime you want. Better get downstairs now, though. Mom will be wondering what happened to you."

"Okay. But I'll be back, gramps. Thanks. Thanks a lot."

Stenny flew down the stairs, and excitedly told his mom about his radio contact with South Africa.

"You're a good kid," his mom said, and hugged him. "You've made your grandpa's day."

Stenny went back to his room and turned on his laptop. He did a search under "Ham Radio License Classes." Just out of curiosity, of course.

In the days that followed, there was a new atmosphere in the Winters household. Stenny was especially cheerful, and not just because it was Christmas Eve. He knew he'd get a Christmas gift from mom, probably a new smartphone, but that wasn't what filled him with so much spirit. He had something to tell gramps that night that he knew gramps would want to hear.

Later, Stenny, mom and gramps gathered around the dining room table, and as the dinner was served, Stenny turned to gramps and spoke.

## Gramps and the Magic Box

"Well, gramps, I've done it."

"What have you done, young feller?"

"I've enrolled in a ham radio license class at the local radio club.  I've decided to join the fun of ham radio."

The old man stared at his grandson, speechless.

"Yes, gramps, I've decided to get my General first, then my Extra.  I want to go all out and work that DX, like you. And I want you to teach me that Morris code, too."

Gramps' eyes were wet.

"Bless you, Stenny.  That's the best Christmas present this old man's ever had."

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*Maybe—just maybe, you might be another "gramps."  And maybe—just maybe there might be a "Stenny" you know who could use an introduction to our beloved hobby.  If you do, maybe someone will give you a Christmas present like gramps got from Stenny.  Merry Christmas to all, and to all, a good night!*

**LA9XGA – These guys really think "Winter Field Day" ! Mark your calendar for January 25-26th.**

# Theoretics Demystified

Have voice will travel from Marconi to the moon!! Last time we touched upon microphones and recorded sound and, previously, reproducers of sound. This time we will talk about how the human voice has been on the radio waves, from the beginning to the present.

It all started with spark, but you say “spark is not voice.” The answer is that spark was the first type of radio transmission outside of God-made lightning. While using spark, someone figured out how to control or modulate the spark transmitter. The result was very crude and the carbon microphone used had to be water cooled to keep the carbon granules from fusing together.

Later with the advent of the De Forest vacuum tube and its subsequent improvement, the ability became practical to modulate the vacuum tube oscillator with the voice signal. The original method was amplitude modulation - that is increasing and decreasing to radio frequency oscillator’s output in accordance with the strength of the voice or audio signal.

The next change came when Edwin Armstrong figured out how to frequency modulate the rf signal. That means moving the center of the rf oscillator’s output back and forth in accordance with the audio signal. The whole point of frequency modulation or FM is that it is immune to amplitude modulation interference such as lightening or ignition noise, and is able to provide much higher sound fidelity.

Spark started in the early years of radio and FM in the forties. Since then there have been many other types of modulation, most of them being digital as in telemetry, which leads us to the topic of the moon.

Voice has been transmitted to the moon as in the first moon landings, using various modulation schemes including telemetry and voice. The ham radio part is that hams have been bouncing voice off of the moon and back again on a regular basis. So there we have it from spark to vacuum tubes to transistors to integrated circuits using discreet components to surface mount components and to systems on a chip.

Now the newest thing is laser light technology being used as the processing and communications medium within processing units. It has been tried using visible light but clouds and dust and water vapor present impediments to the laser signal. Other wavelengths of ‘light’ have been tried such as x rays with varying success. The advantage of visible light communication is that much more information can be transmitted due to the shortness of the waves (measured in angstroms) and the lack of velocity factor considerations.

As an aside, the newest computer tech is light based but not yet available to the general public - being so new and expensive and much is still in the experimental stages.

Now back to the topic at hand! Not to forget our CW aficionados! Before radio there was telegraphy, first the American code, using ‘clacky’ sounders, with it’s own unique set of characters and the now-used Morse code which uses tones of varying lengths. The Morse code was not actually designed by Morse but by his assistant; but it was introduced and proffered by Morse. The Morse code is still the most efficient generally used form of communication, not withstanding digital forms. That being said, voice is still the most friendly form and, unlike code or digital (which has already been hacked and roboticised), is almost impossible to fake or alter. (You KNOW when you are talking to a person).

The other means of communication that is impossible to tamper with is, guess what, fax! There is much more, but our main focus here has been the transmission of voice from one person to another. Telephone was first; and then graphaphone and gramaphone recordings which could be made and delivered to someone else. You say, “what does this have to do with radio?” Answer is that all of those early technologies were and still are intertwined. Now we have so much more, audiotape then CDs and now motionless storage on digital devices. Remember when Spock put the little ‘card’ into the slot to view the ships log on Star Trek? It was only an idea then but now is commonplace. Hams use this technology to record QSOs and for automatic CQ calling!

A lot of stuff here, a lot of history.

Fred Wawra, W2ABE, 73.

# FLARC 2019 Holiday Party

Thanks go George W3EH for these photos.

## FLARC Annual Business Meeting Minutes 6 December 2019

Vice President Van W2DLT called the meeting to order at 6:32 p.m. The members rose and recited the Pledge of Allegiance.

Secretary Randy WU2S called the roll of officers and trustees and all were present except President Brad KM2C. Brad arrived at the meeting at 6:35 pm prior to voting on bylaw changes and the election of officers and trustees. The meeting had a quorum to conduct club business.

Secretary Randy WU2S announced that the minutes from the November meeting were sent to all members of record and published in the club's newsletter, The Resonator, which is on the club's website at http://newsletters.FairLawnARC.org .

He asked the members present if there were any corrections or amendments needed. There were none so Skip KD2BRV moved to accept the minutes as published and Nomar NP4H seconded the motion. The motion passed by acclamation.

Treasurer Al WA2OWL read this month's Treasurer's Report. Brian KD2KLN moved to accept the report as presented and Gene WO2W seconded the motion. The motion passed by acclamation.

Secretary Randy WU2S read each of the four proposed bylaw amendments and the members present voted on each individually after each was read. All four amendments passed unanimously by acclamation.

### Meeting Notes, continued.

Secretary Randy WU2S announced that the nominated slate of officers was unopposed and that the officers are elected. They are:

| | | |
|---|---|---|
| Nomar | NP4H | – President |
| John | W2JLH | – Vice President |
| Al | WA2OWL | – Treasurer |
| Randy | WU2S | – Secretary |

Secretary Randy WU2S reported that there are two candidates for the Trustee position for a three-year term. The candidates were Judith KC2LTM and Ed WX2R. Randy and Gene WO2W distributed ballots to the members present.

When the members indicated that they had voted, President Brad KM2C collected all the ballots. Brad counted the votes and reported that Ed WX2R won the election by a slim margin of two votes.

Don N2PRT photographed the outgoing and incoming officers and trustees.

Vice President Van W2DLT announced decision of the FLARC Council to recognize the extensive contributions of a FLARC member with the **Frank Leonard W2NPT Award**.

Van described the many accomplishments of Karl W2KBF, this year's recipient. Gene WO2W, the first recipient of this award presented the plaque to Karl.

All members and guests present rose and applauded Karl.

Continued on next page.

## Meeting Notes, continued.

President Brad KM2C reflected on FLARC's many accomplishments during his two-year tenure as president.

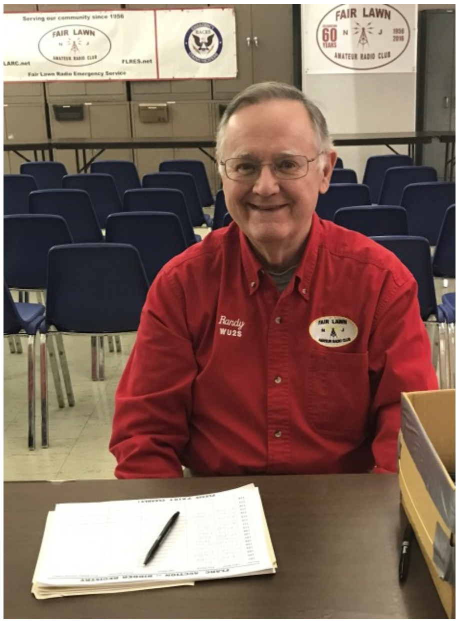
Brad thanked all FLARC members for their help in maintaining FLARC as one of the best radio clubs in New Jersey.

Having no further business, President Brad KM2C asked for a motion to adjourn. Gene WO2W so moved and Brian KD2KLN seconded the motion. The members present voted in favor and the meeting was adjourned at 6:51 p.m.

Members and guests proceeded to enjoy a festive holiday dinner with an abundance of great food, good conversations and music.

Respectfully submitted,

Randy WU2S,
Secretary



Randy WU2S ready to sign in Bidders

## The Famous FLARC Auction – 2019

Ready to sign in the Sellers
K2FTP, KO2OK and KD2MOB

Our President and co-auctioneer – Brad KM2C

The lull before the storm !